



Committed to Customer Success

Always
Moving Forward



2024 Mobile Computing Solutions Product Selection Guide

www.nexcom.com



About NEXCOM

Mobile Computing Solutions

Founded in 1992, NEXCOM is committed to being your trustworthy partner in building the intelligent business. NEXCOM makes the difference by utilizing its industrial computing experience, a highly talented R&D team, strong world-class ODM services, and rapid support to customers. NEXCOM has worldwide customers from more than 50 countries and we never stop growth with our business partners. As we accelerate towards the future, NEXCOM has been playing an important role in bringing intelligence to transportation.

NEXCOM's Mobile Computing Solutions (MCS) has extended and developed many products for use in AI, 5G, and safety related applications. We're creating a safer working environment and saving operational costs through improvements in logistics for more efficient fleet management. Through the application and development of 5G, a better internet experience can be realized. We support our business partners to further promote edge AI computing for ADAS, AMR, and autonomous driving.

We focus on developing practical technologies, and constant growth brings us many advantages in the automotive sphere:

- Superior power designed for uninterrupted operations
- Smart and effective patented designs, resistant to very extreme environments
- Various communication module options (LoRa, V2X, NB-IoT, LTE, 5G NR, Wi-Fi 6/6E)

- Modular designs for the ease of maintenance
- Customized firmware and specialized ODM hardware solutions

NEXCOM has the passion, hope and dedication to keep moving forward making daily lives better through innovation. NEXCOM is forging ahead into the future and making it a success with our business partners!

Always Moving Forward



Our Core Competencies -

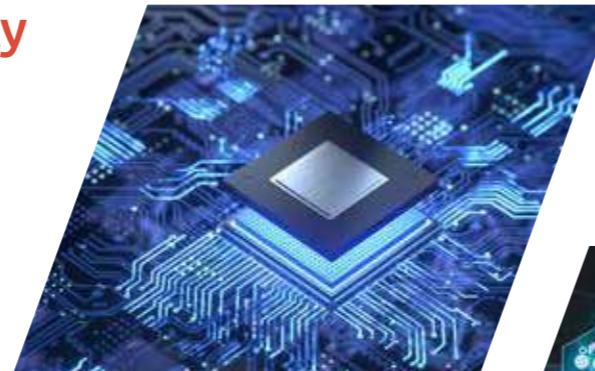
Building a Foundation for Interconnected IoV and Value-Added Innovation



Premium Computing Design Capability

Computing power drives vehicle applications, which is why NEXCOM offers a wide range of computing platforms to meet different vehicle needs

- RISC platform (NXP i.MX6, i.MX8, Rockchip, TI)
- Intel Atom® platform (Bay Trail, Apollo Lake, Elkhart Lake, Alder Lake-N)
- Intel® Core™ i platform (Core i 8th, 9th, 11th, 12th, 13th Gen)
- Intel® high-end Xeon® platform
- NVIDIA® Jetson TX2, Xavier™ NX, Orin™ NX, AGX Orin™ integrated
- Over 20 years of experience in designing rugged devices and vehicle/railway computers



RF Communication Expansion

For the array of wireless usage cases, NEXCOM specializes in RF communication expansion, providing a comprehensive series of proprietary mini-PCIe/M.2 modules, allow users maximum flexibility in optimizing vehicle configurations

- GNSS (RTK, Dead reckoning)
- NB-IoT, 4G LTE, 5G NR
- DSRC/C-V2X, LoRa
- Wi-Fi 6/6E



Reliability Quality

- Fanless design and IP67 protection for extreme environmental conditions
- IK08 impact resistance rating on external mechanics
- Meets CISPR25 standard
- Vehicle (E mark) and railway (EN50155, EN45545-2) certifications
- CE EMC (Electromagnetic Compatibility) and FCC conducted and radiated emissions certifications
- Supporting more certifications (Safety, RED, LVD, MIL-STD-810, etc.)

Software Solutions

- SDK (API, programming guide, demo AP) supports for Linux, Android and Windows OS
- BSP (bootloader, kernel driver, OS (Android, Yocto, Ubuntu))
- MCU (customized MCU firmware for small quantities)
- BIOS (customized BIOS for small quantities)
- Secure System Development (TPM, Secure Boot, Boot Guard)



OEM/ODM Services

- Over 20 years of experience in industrial-grade computer design and manufacturing
- Seasoned design capabilities in customized system and software integration
- Certificated, 100%-owned manufacturing facilities in Taiwan
- Expertise in mobile transport technologies, with vertical domain know-how
- Acceptance of small to medium quantities, with fast time-to-market delivery



Specialization in AI Technology

- Specialize in NVIDIA® (GeForce/Quadro, PCIe x16/MXM, Jetson), Google Coral (M.2, mini-PCIe), and Hailo AI accelerators (M.2, mini-PCIe, onboard)
- Support partners to drive deeper customer engagement in AI + mobile edge computing applications
- Provide edge processing and AI capabilities to software partners/developers to innovate and create new business models

Our Product Portfolio



Product Series

- Edge AI Telematics Solution
- Vehicle Telematics Computer
- Railway Computer
- Vehicle Mount Computer
- Modular Vehicle Computer System
- Vehicle Mount Display
- In-Vehicle Networking
- In-Vehicle HDMI Extender over IP



ATC Series

Advanced Telematics Computer w/ GPU

- Designed for AI applications: ANPR, video analytics
- Selected NVIDIA GPU, MXM, Google TPU, and Hailo module add-ons
- 5G/LTE, Wi-Fi 6/6E, BT, CAN/OBD, GNSS + DR, PoE, and multi-SIM integration



VTC Series

In-Vehicle Telematics Computer

- General purpose, high-performance telematics computer
- 5G/LTE, Wi-Fi 6/6E, BT, CAN/OBD, GNSS + DR, PoE, and multi-SIM integration
- IP65/67 ingress protection
- Power management
- Backup battery kit



nROK/aROK/vROK Series

Railway Computer

- Box/Panel PC with fanless and rugged design
- 5G/LTE, Wi-Fi 6/6E, BT, CAN/OBD, GNSS + DR, PoE, and multi-SIM integration
- Optional isolated 24~110VDC power input
- EN50155 & EN45545-2 certifications



MVS Series

Modular Vehicle Computer Systems

- Modular CPU board + I/O board + expandable I/O board
- Flexible integration of LTE, Wi-Fi, BT, PoE, and other I/Os
- Easy customization of different I/O interfaces, with quick re-spins for faster time-to-market



VMC Series

Rugged Vehicle Terminal

- Driver's operational display
- Designed for outdoor applications
- Full IP65 certification
- IK08-rated screens
- Vibration-, shock-, dust-, and water-resistant
- 5G/LTE, Wi-Fi 6/6E, CAN/OBD, GNSS + DR



PoE/10G LAN and RTSP Solutions

- Extends Full HD HDMI over IP for Passenger Infotainment Systems
- Design for video surveillance and AI video analytics applications
- Comply with 802.3af/at with RJ45 or M12 connector (D, X-coded)
- Mobile PoE switch and 10G PoE cards



Premium Solutions




- IP65/IP67 protection against water and dust
- IK ratings protection provided by panel PC against external mechanical impacts to display
- Performing conformal coating protection against moisture, dust and chemicals



Internet of Vehicles (IoV)

Creating a Fully-encompassing Car Ecosystem Through IoV Innovation

Build Your Next-Gen Mobile Computing Solutions

-  Enable smart transportation and traffic infrastructure with AI inference
-  Connect to next-gen wireless 5G NR, Wi-Fi 6/6E, DSRC/C-V2X network technologies
-  Perform intelligent surveillance with event prediction and detection


First Response
AI for ANPR & Facial Recognition



AI Edge Computing
AI Vision for Inspection/People Counting



AI Edge Computing
Autonomous Driving/ADAS



Smart Public Transit
Infotainment & PIS



Smart Public Transit
Infotainment & PIS



Smart Public Transit
Intelligent Video Surveillance



Smart Public Transit
Infotainment & PIS




AI Edge Computing
AI Traffic Control & Management



Material Handling
Positioning Management



Logistics
Fleet Management



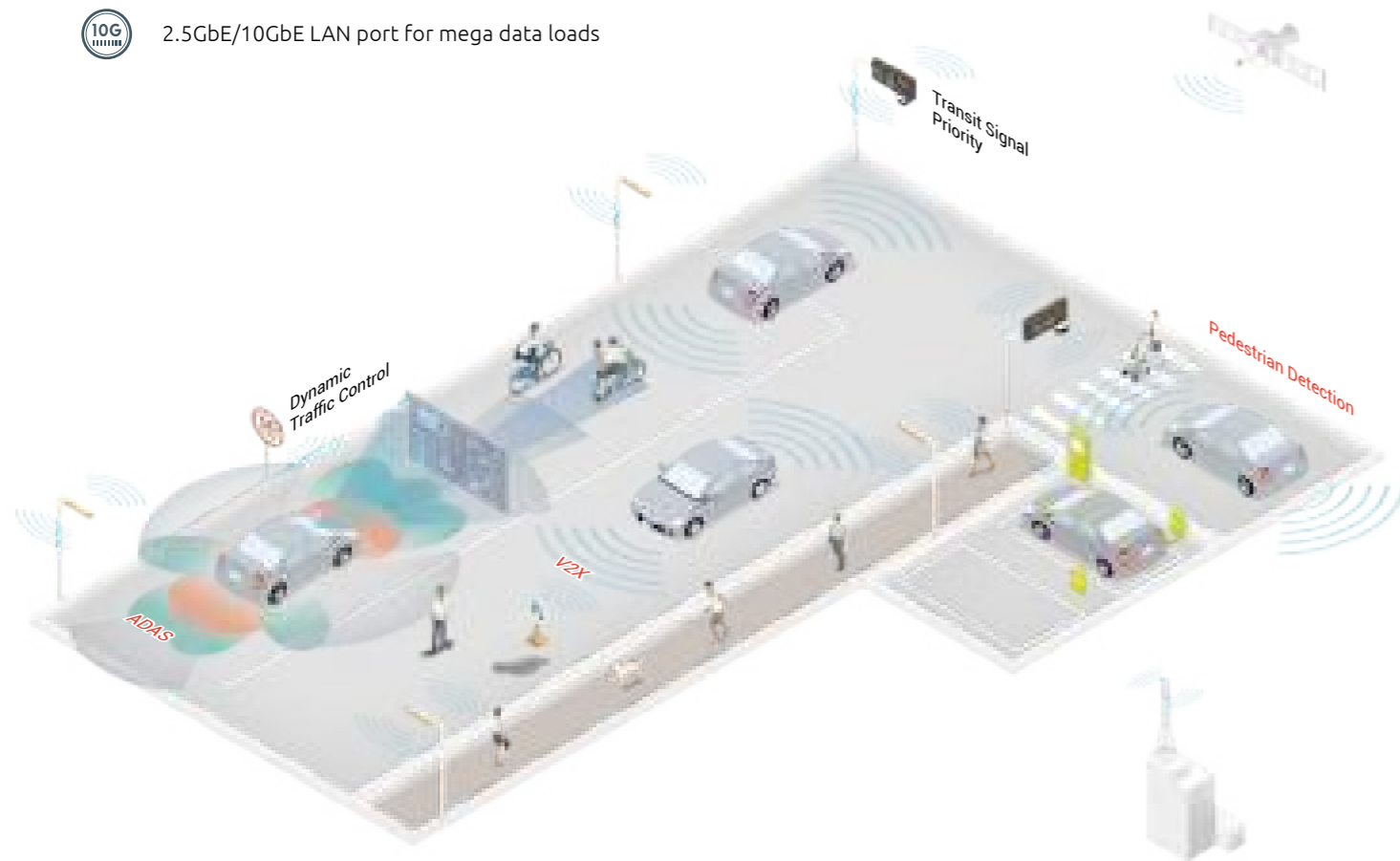
AI-Assisted Next-Generation Driving

Deep Learning Makes the Next-Generation Driving Perceptive and Practical



NEXCOM's Solutions

- Wide selection of GPU from NVIDIA, Google Coral, to Hailo-8
- PoE, DIO, USB, RS232/422/485 for external peripherals
- 2.5GbE/10GbE LAN port for mega data loads
- GNSS and WWAN for accurate positioning and communication
- Compliant to E-Mark, IP-grade, MIL-STD-810H for rugged environments



ADAS, Autonomous Driving, AMR Application Highlights

- High computing requirements for AI recognition
- Precise tracking/positioning
- Connectivity for diverse peripherals: MIPI, IP/GigE cam, LiDAR, radar
- Rugged design with add-on, built-in GPU module or SOM
- Low-latency signal transmission and rapid cloud computing access



Recommended Models

ATC 3530
 IP67 Accelerated Edge AI In-Vehicle Computer with built-in NVIDIA® Jetson Xavier™ NX SOM

- Supports 4-CH MIPI SerDes (VBO)/ cameras (up to 25m cable reach)/4-ch PoE
- Supports LTE/5G and Wi-Fi 6/6E

VTC 7260-7C4
 Fanless AI-Aided Vehicle Computer with 11th Gen Intel® Core™ CPU

- Support M.2 Hailo AI card
- Support 4-port 2.5GbE PoE+

ATC 8010
 AI Inference, In-Vehicle, Fanless Computer with Intel® Core™ 8th Gen. CPU

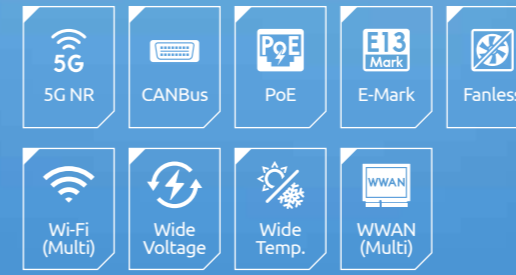
- Support NVIDIA® MXM GPU (Turing and Ampere-based Quadro)
- Up to 8 independent GbE PoE+

ATC 8110
 AI Powered In-Vehicle Computer, Intel® Core™ 8th/9th CPU S/Refresh

- Add-on NVIDIA graphics card RTX30xx, 40xx series (~350W)
- MIL-STD-810H for anti-vibration/shock to protect graphics card

Smart Public Bus Transit

Take a Ride to a Safe, Green, Fun, and Comfortable Tomorrow



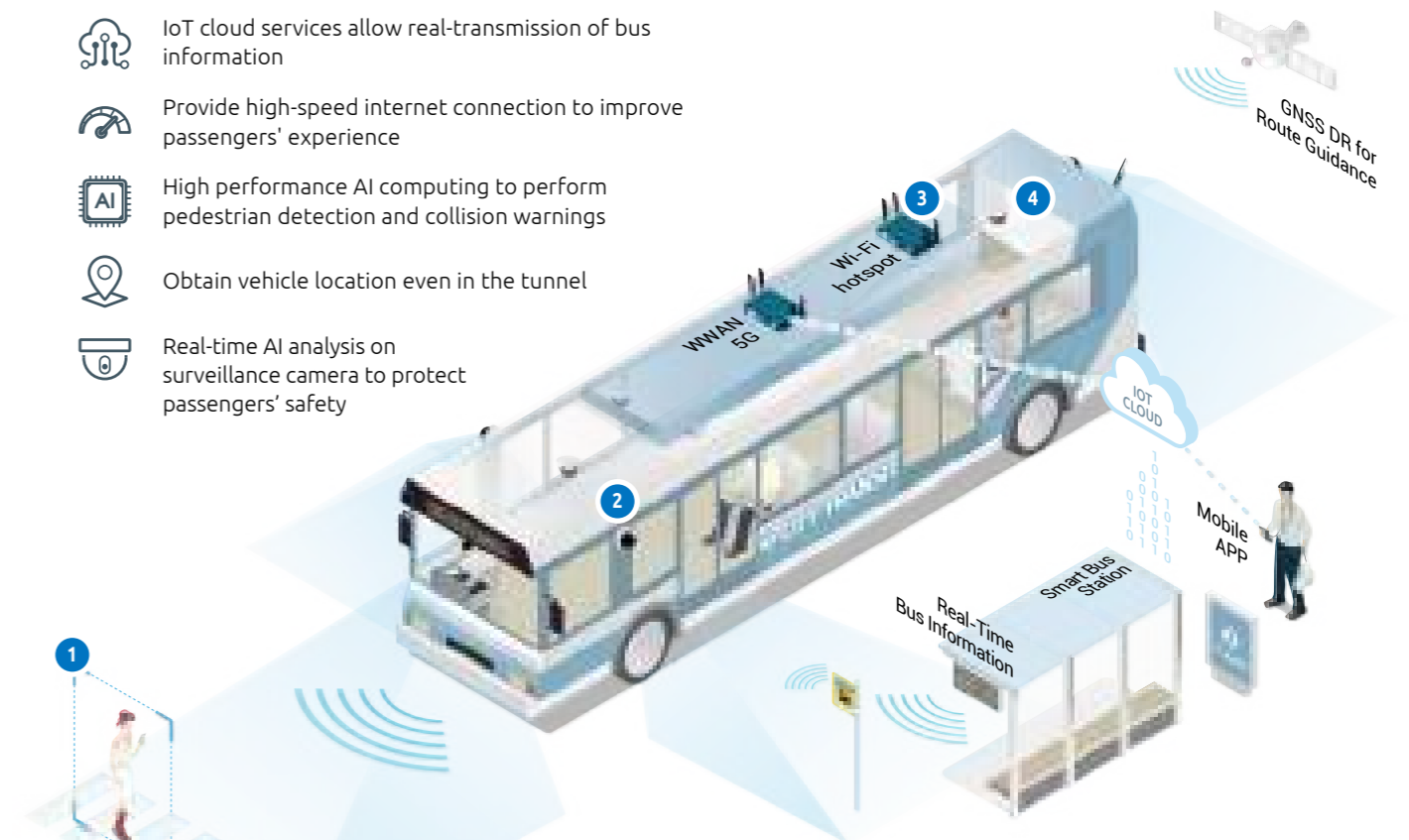
NEXCOM's Solutions

- PC-based in-vehicle NVRs for real-time surveillance
- Built-in GNSS with dead reckoning function for accurate positioning
- Built-in communication port for signage, card readers, and safety sensors
- Support multiple Wi-Fi and cellular modules for uninterrupted internet connection
- In-vehicle HDMI extender over IP for PIS and infotainment



eBus Application Highlights

- IoT cloud services allow real-transmission of bus information
- Provide high-speed internet connection to improve passengers' experience
- High performance AI computing to perform pedestrian detection and collision warnings
- Obtain vehicle location even in the tunnel
- Real-time AI analysis on surveillance camera to protect passengers' safety



Recommended Models




VTC 1031/1031-C2
Fanless In-Vehicle Computer, Intel Atom® Elkhart Lake x6413E

- Dual display outputs and 2.5GbE LAN port
- 5G NR and Wi-Fi 6/6E wireless communication options




VIP 1000
Full HD HDMI Extender Over IP

- Plug and play
- 2 x Full HD HDMI output, up to 100 meter distance
- Unicast, daisy chain and multicast modes support



VTC 6221
Fanless In-Vehicle Computer, Intel Atom® Quad Core x7-E3950

- 3 x mini-PCIe + 2 x M.2 Key B expansion slots
- 3 x LTE/5G modules supported



VTC 7260-xC4
Fanless In-Vehicle Computer, Intel® 11th Gen Tiger Lake UP3

- 1 x LAN + 4 x independent PoE supported
- 2 x mini-PCIe + 3 x M.2 Key B/E/M expansion slots

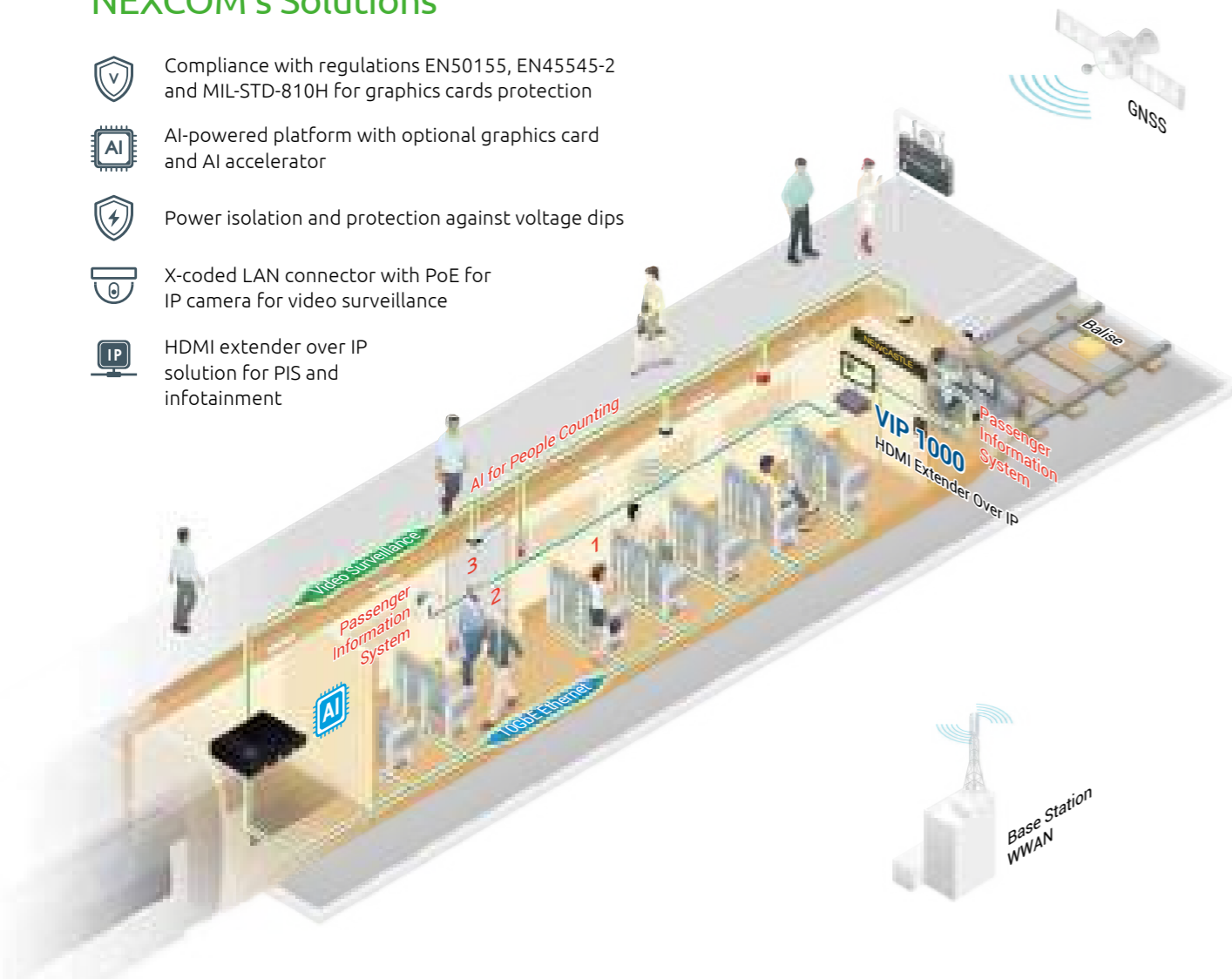
Smart Public Rail Transit

Telematics for Transportation Security and Efficiency, Plus Passenger Satisfaction



NEXCOM's Solutions

- Compliance with regulations EN50155, EN45545-2 and MIL-STD-810H for graphics cards protection
- AI-powered platform with optional graphics card and AI accelerator
- Power isolation and protection against voltage dips
- X-coded LAN connector with PoE for IP camera for video surveillance
- HDMI extender over IP solution for PIS and infotainment



Vision Application Highlights

- Rugged design protects graphics cards against shock and vibration
- Graphics card and AI accelerator supported for edge computing
- PoE high-resolution cameras using PoE ports for video input
- Global navigation satellite system for precise and real-time location
- Multipurpose I/O connectors connect with different sensors/controllers for collecting data



Recommended Models

nROK 1031/1031-C2
 Fanless Rolling Stock Computer, Intel Atom® x6413E (Elkhart Lake)

- 5G NR and Wi-Fi 6/6E wireless communication options
- Optional AI accelerator M.2/mini-PCIe module

nROK 6221
 Fanless Rolling Stock Computer, Intel Atom® x7-E3950

- 3 x mini-PCIe + 2 x M.2 socket expansion
- 3 x LTE/5G module supported

nROK 7251-7C4
 Fanless Rolling Stock Computer, 9th Gen Intel® Core™ CPU

- 4 x Independent 10/100/1000 Mbps PoE 802.3af/at, total 60W
- 2 x External SSD/HDD and 2 x mSATA for RAID 0, 1

aROK 8110
 AI Powered for Autonomous and Machine Vision, Intel® Core™/Xeon® CPU

- 4 x PCIe 3.0 slots for discrete graphics/inference/frame grabber cards
- 4 x external storage for 2.5" SSD/M.2/U.2 NVMe SSD

Public Works

Playing the Key Roles of Enriching the Community and Enhancing the Quality of Life



NEXCOM's Solutions

- Compact, Rugged, IP65/IP67 protection for reliable operation in harsh environments
- Military standard anti-vibration/shock, extended operating temperature range, -40°C to 70°C
- Combination of GNSS and WLAN/WWAN modules for tracking and massive data communication
- Street view image recognitions through AI accelerator card
- Diverse I/O ports, USB, GbE, COM, GPIO and CANBus, connect peripherals and acquire vehicle data



AI-aided Sweeper Application Highlights

- GbE PoE ports supporting IP cameras for obstacle/potholes detection
- Precise and real-time vehicle location via AVL technologies
- Correcting and transmitting data to cloud for AI models re-training
- Vibration/shock resistance and wide-range operating temperature
- Perform Inference at the edge through AI accelerator card



Recommended Models

VMC 220/2020
 8" Rugged Vehicle Mount Computer, NXP i.MX 8M Quad/Intel Atom® x7-E3950

- 1280 x 720 resolution, sunlight readable (1000 nits), PCAP touch screen
- IP65 water-resistant and IK08 external damage protection ratings

VTC 1031/1031-C2
 Fanless In-Vehicle Computer, Intel Atom® Elkhart Lake x6413E

- Dual display outputs and 2.5GbE LAN port
- 5G NR and Wi-Fi 6/6E wireless communication options

VTC 1911-IPK
 Fanless In-Vehicle Computer, Intel Atom® Single Core E3815

- Telematics IoT gateway with super slim and ruggedized design
- IP67 water- and dust-resistant rating

VTC 6220-BK
 Fanless In-Vehicle Computer, Intel Atom® Quad Core x7-E3950

- 1 x M.2 Key B & 1 x mini-PCIe for WWAN module + 2 x mini-PCIe for various applications
- Dual externally accessible 2.5" SSD trays

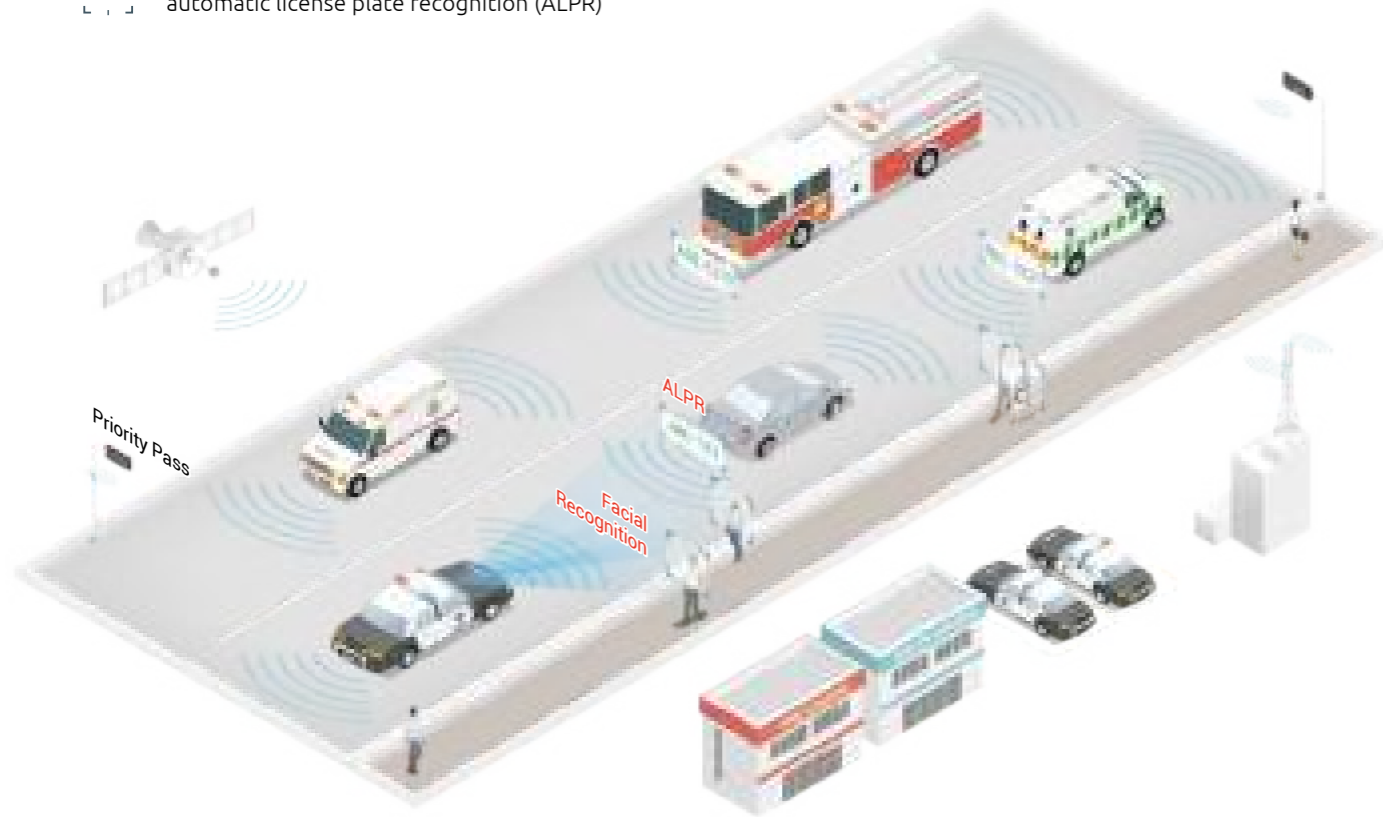
First Response Vehicles

Trusted Crime Fighting and Emergency Services at Any Time



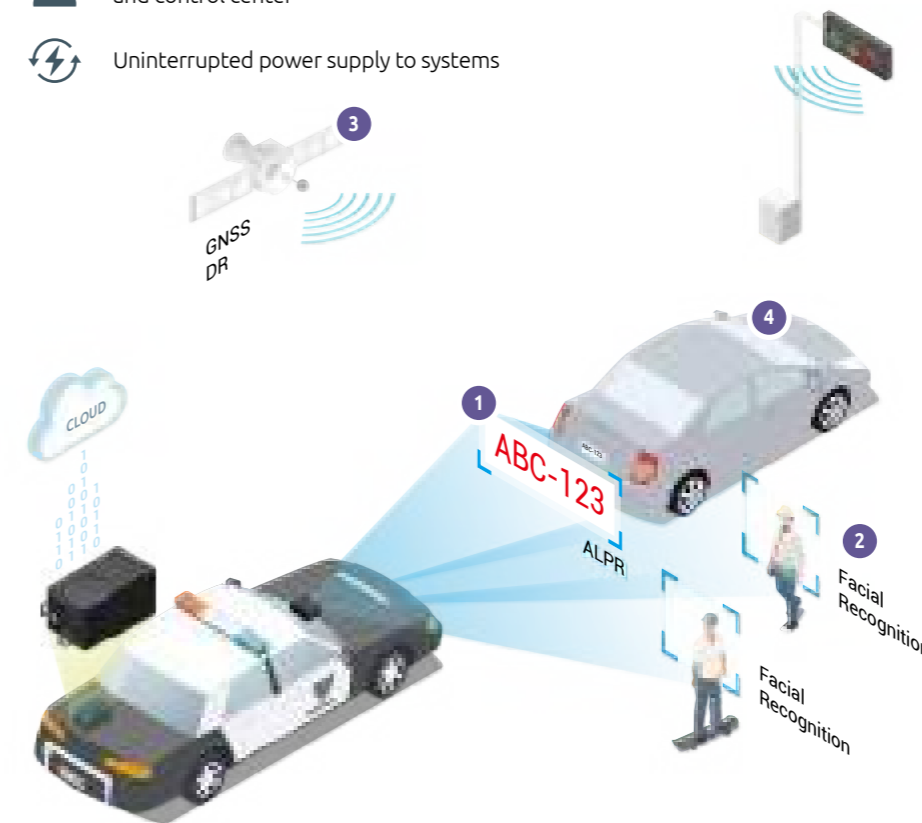
NEXCOM's Solutions

- Supports up to 8 IP cameras over PoE ports (IEEE 802.3 af/at)
- CANBus 2.0B communication to read vehicle status accurately and quickly
- Supports multiple AI modules for fast facial and automatic license plate recognition (ALPR)
- Supports multiple LTE & 5G carriers for stable communication between vehicle and control center
- Backup battery ensures uninterrupted system operation



Smart AI Patrol Application Requirements Highlights

- Ability to aggregate video feeds from multiple IP cameras
- Real-time surveillance on multiple video displays
- High AI performance for sophisticated image processing (facial recognition, ALPR)
- Quick and trusted communication with emergency and control center
- Uninterrupted power supply to systems



1 Support for speed violation detection and ANPR technologies



2 Facial recognition technology helps identify suspects



3 Rapid emergency dispatch and real-time monitoring



4 Driver seat belt and mobile phone use detections

Recommended Models

VTC 6222-C4S
 In-Vehicle Computer, Intel Atom® Quad Core E3950

- 1 x LAN + 4 x PoE supported
- 1 x RS232 (full), 1 x RS232 (Tx/Rx), 1 x RS422/485

VTC 7251-7C4
 Fanless In-Vehicle Computer, Intel® Core™ i7-8700T

- 1 x LAN + 4 x independent PoE supported, total 60W
- 4 x mini-PCIe slots + 1 x M.2 Key B expansion

ATC 8010
 AI Inference, In-Vehicle, Fanless Computer with Intel® Core™ 8th Gen. CPU

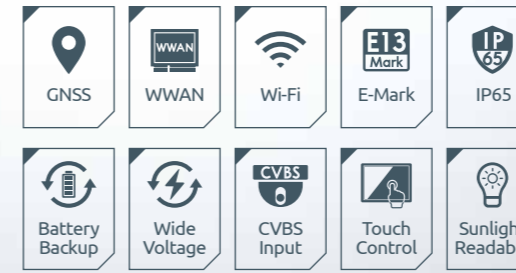
- Support NVIDIA® MXM GPU (Turing and Ampere-based Quadro)
- Up to 8 independent GbE PoE+

ATC 8110
 AI Powered In-Vehicle Computer, Intel® Core™ 8th/9th CPU S/Refresh

- Add-on NVIDIA graphics card RTX30xx, 40xx series (~350W)
- MIL-STD-810H for anti-vibration/shock to protect graphics card

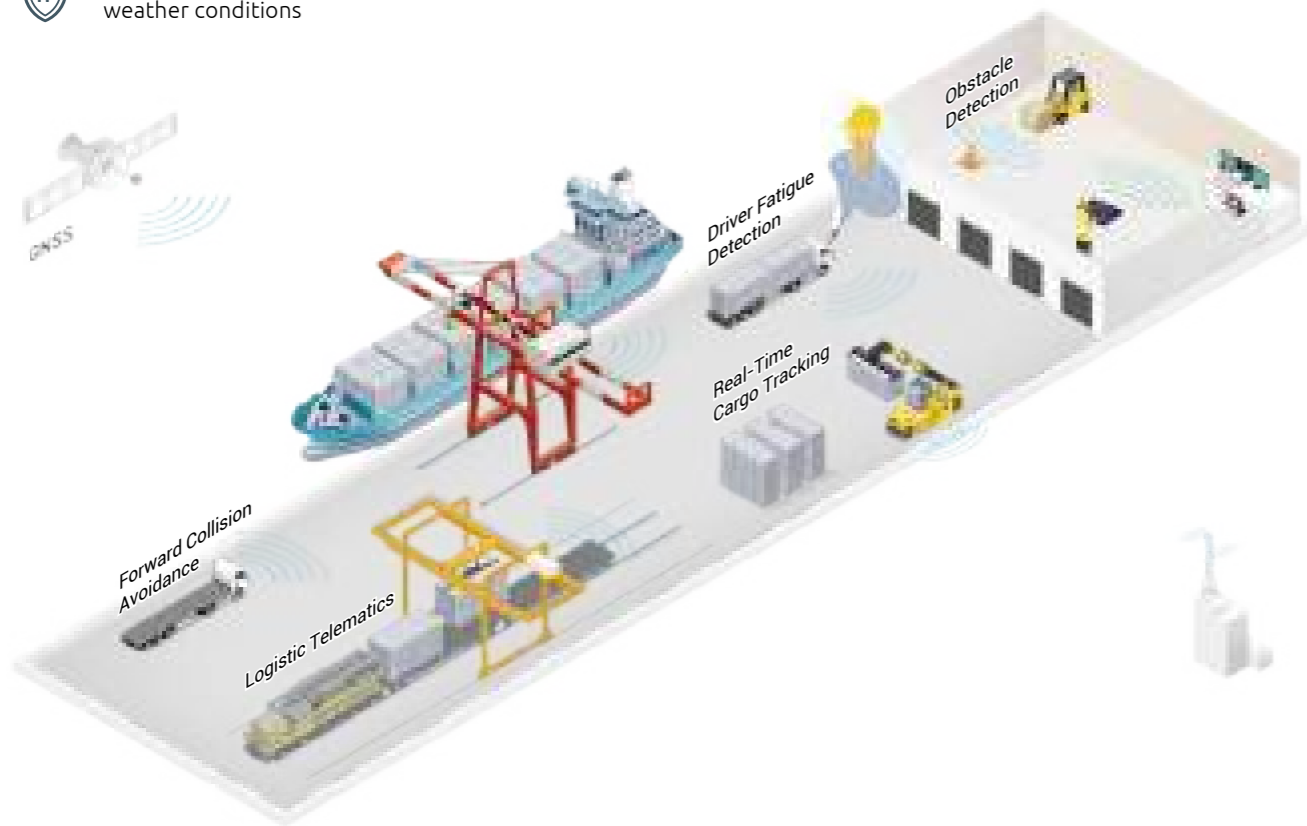
Port Management & Warehouse

Around-The-Clock, Reliable Delivery:
Your Trust is Our Commitment



NEXCOM's Solutions

- High-brightness LCD touchscreen panel for sunlight readability
- AI-powered edge computing platform with AI accelerator
- IP65 rating ensures that it withstands extreme weather conditions
- Wide-range power input (9~60VDC) fits different vehicles' UPS batteries
- Built-in backup battery ensures protection of mission critical to operations



Forklift Application Highlights

- IP65 rating ensures lower risk of water/dust damaging interior electronic parts
- Sunlight readability (over 1000 nits) enhances display visibility
- Ability to aggregate video feeds from multiple cameras for AI detection
- IK08/IK09 vandal-proof rating: reduces injuries and RMA costs, while prolonging lifetime
- Backup battery for approx. 15 min. of operation when forklift battery needs to be replaced



| | | | |
|--|--|-------------------------------|-----------------------------------|
| 1 Surround camera for ADAS and safety | 2 Uninterrupted power supply from battery | 3 Sunlight readability | 3 IP65 and IK08 Protection |
|--|--|-------------------------------|-----------------------------------|

Recommended Models

VMC 1100

7" All-In-One Vehicle Computer, Intel Atom® E3825

- 800 x 480 resolution, 4-wire resistive, anti-glare touch screen
- Front panel IP54 and F1~F5 function keys

VMC 220/2020

8" Rugged Vehicle Mount Computer, NXP i.MX 8M Quad/Intel Atom® x7-E3950

- 1280 x 720 resolution, sunlight readable (1000 nits), PCAP touch screen
- IP65 water-resistant and IK08 external damage protection ratings

VMC 3020

10.4" Rugged Vehicle Mount Computer, Intel Atom® x5-E3930

- 1024 x 768 resolution, sunlight readable (1200 nits), 5-wire resistive touch screen
- Front panel IP65 water-resistant
- 9V~60V DC power in

VMC 4020

12.1" Rugged Vehicle Mount Computer, Intel Atom® x7-E3950

- 1024 x 768 resolution, sunlight readable (1200 nits), 5-wire resistive touch screen
- IP65 water-resistant rating (VMC 4020-4A1)
- 9V~60V DC power in

Fleet Management

Improving Driver Safety, Saving Energy, and Increasing Overall Fleet Efficiency



NEXCOM's Solutions

- Combination of GNSS and WLAN/WWAN modules for tracking and massive data communication
- AI networks through AI accelerator to avoid car/pedestrian collisions
- USB, GbE, COM and CANBus for I/O peripherals
- Multi-SIM support for cross country route
- Extreme low/high temperature resistant, IP65/67 protection for harsh environments



Cold Chain Logistics Application Highlights

- Real time 5G telematics connecting all vehicles and control center
- AI analysis on surrounding images to perform ADAS and protect pedestrians' safety
- GNSS/DR precise positioning to mapping vehicles location, ensure vehicles on course/scheduling
- Consistent monitoring of temperature and humidity sensors, accompanied by data uploads to the cloud
- CANBus retrieving ECU information, vehicles speed, fuel volume, etc., to improve better eco-driving



GNSS/DR guides route tracking



5G telematics for fleet communication



Cold chain monitoring



Recommended Models



VMC 220/2020

- 8" Rugged Vehicle Mount Computer, NXP i.MX 8M Quad/Intel Atom® x7-E3950
- 1280 x 720 resolution, sunlight readable (1000 nits), PCAP touch screen
 - IP65 water-resistant and IK08 external damage protection ratings



VTC 1910

- Fanless In-Vehicle Computer, Intel Atom® Single Core E3815
- Telematics IoT gateway, super slim and ruggedized design
 - Dual SIM cards for WWAN modules



VTC 1030

- Fanless In-Vehicle Computer, Intel Atom® Elkhart Lake x6211E
- Compact and fanless design
 - 5G NR and Wi-Fi 6/6E wireless communication options

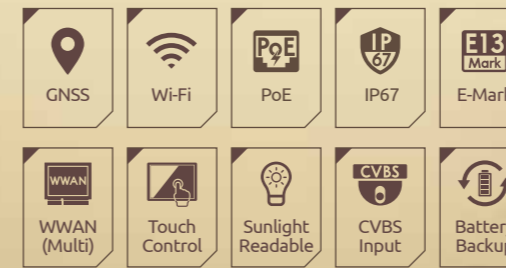


VTC 1031/1031-C2

- Fanless In-Vehicle Computer, Intel Atom® Elkhart Lake x6413E
- Dual display outputs and 2.5GbE LAN port
 - 5G NR and Wi-Fi 6/6E wireless communication options

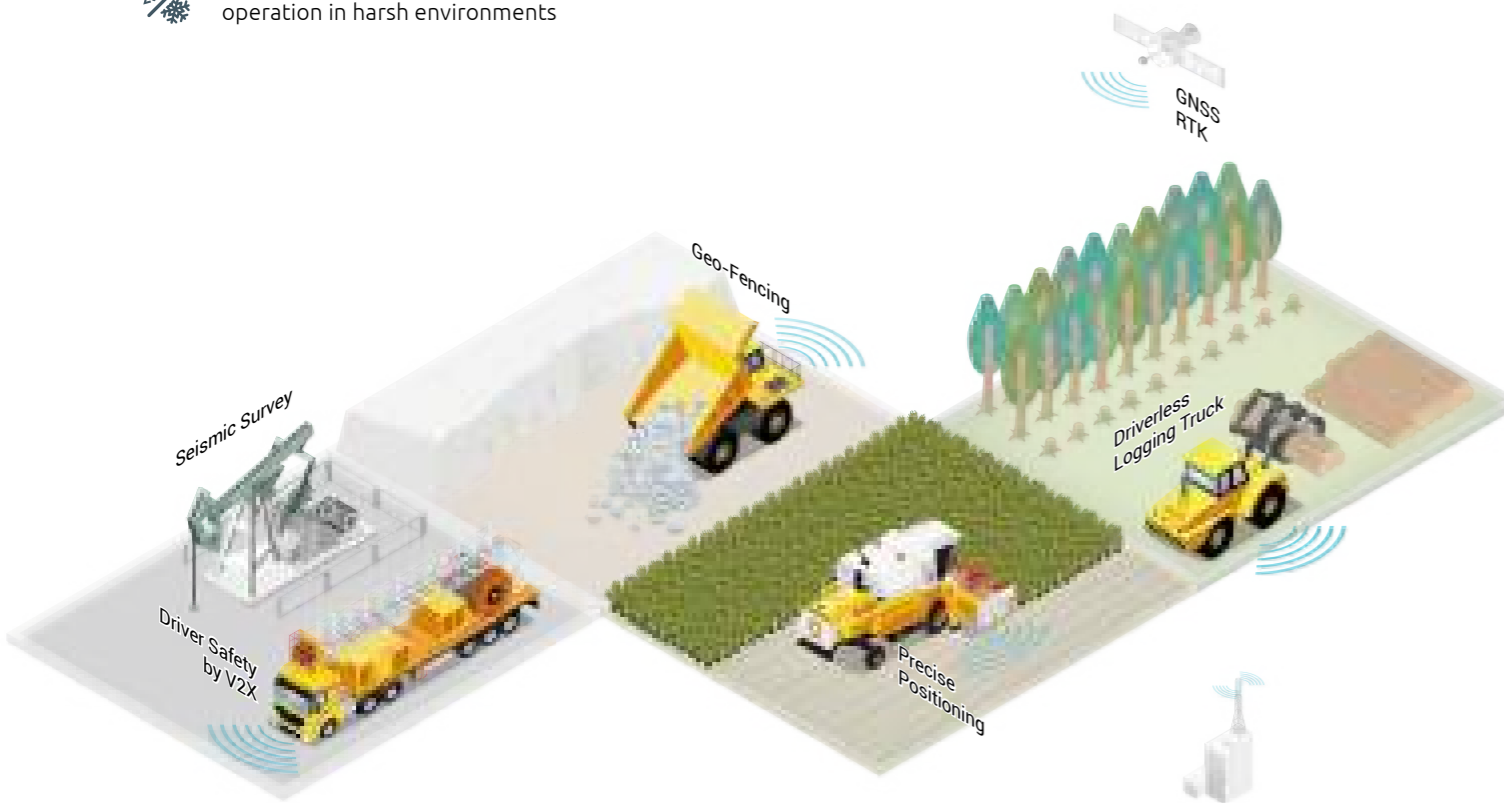
Raw Material Management

Born Tough to Increase Efficiency and Productivity



NEXCOM's Solutions

- High-brightness LCD touchscreen panel with IK08 protection
- GNSS/GPS with RTK and DR accuracy compensation for accurate vehicle positioning
- Rugged design, IP65/IP67 protection for reliable operation in harsh environments
- Rich I/O ports, USB, GbE, COM, GPIO and CANBus, connect peripherals and acquire vehicle data
- Edge AI applications, including object and driver behavior detection, prevent accidents



Mining Application Highlights

- Rugged IP65/IP67 design prevents dust and water ingress
- AI recognition to avoid car/pedestrian collisions
- GNSS RTK/DR module can track vehicles' location and prevent theft
- RFID detection can protect heavy trucks from being driven arbitrarily
- DSRC/C-V2X module can communicate among vehicles nearby, recognize signs, and predict paths; lowering collision possibilities



High-nits panel for sunlight readability



IP65/IP67 protection against rain and dust



Special system design for DSRC/C-V2X communication



PoE/MIPI cameras with AI accelerator modules improve safety



Recommended Models

VMC 220/2020
 8" Rugged Vehicle Mount Computer, NXP i.MX 8M Quad/Intel Atom® x7-E3950

- 1280 x 720 resolution, sunlight readable (1000 nits), PCAP touch screen
- IP65 water-resistant and IK08 external damage protection ratings

ATC 3530/3540
 IP 67 Accelerated Edge AI In-Vehicle Computer with built-in NVIDIA® Jetson Xavier™ NX/Orin™ NX SOM

- Supports 4-CH MIPI SerDes (VBO)/cameras (up to 25m cable reach)/4-ch PoE
- Supports LTE/5G and Wi-Fi 6/6E

VTC 1031/1031-C2
 Fanless In-Vehicle Computer, Intel Atom® Elkhart Lake x6413E

- Dual display outputs and 2.5GbE LAN port
- 5G NR and Wi-Fi 6/6E wireless communication options

VTC 7252-7C4IP
 Fanless In-Vehicle Computer, Intel® Core™ i7-9700TE

- 2 x LAN + 4 x independent PoE supported
- IP65 water and dust-resistant rating

2024 New Products



ATC 3540/3520-IP7-4C/AI4CR

IP67 Accelerated Edge AI In-vehicle/Railway Computer

- Built-in NVIDIA® Jetson Orin™ NX SOM, up to 100 TOPS (INT8)
- Support 4-port GbE PoE
- HEVC/H.265 hardware DECODE@ 18 x 1080p30 performance
- Ultra-speed PCIe 3.0 x4 NVMe SSD, LTE/5G modem & Wi-Fi 5/6 expansion
- Operating temperature of -30~70°C



ATC 3750-6C/3750-A6CR

Accelerated Edge AI In-vehicle/Railway Computer

- Built-in NVIDIA® Jetson AGX Orin™ SOM, up to 200/275 TOPS (INT8) performance
- Designed with rugged, compact and hybrid thermal solutions
- 6-port GbE PoE+ for IP CAM/LiDAR sensors, optional 1-port 10GbE
- HEVC/H.265 hardware DECODE@ 6 x 4K30 performance
- E Mark and EN50155



VTC 1030

Fanless In-vehicle/Rolling Stock Computer

- Intel Atom® x6211E (Elkhart Lake) Dual Core processor, 6W
- Compact and fanless design with E Mark certification
- 5G NR and Wi-Fi 6/6E wireless communication options
- Built-in GNSS receiver
- Dual display outputs and 2.5GbE LAN ports



nROK 1030-A

Fanless Rolling Stock Computer

- Intel Atom® x6211E (Elkhart Lake) Dual Core processor, 6W
- Compact and fanless design with EN45545 and EN50155 certification
- 5G NR and Wi-Fi 6/6E wireless communication options
- Built-in GNSS receiver
- Dual display outputs and 2.5GbE LAN ports



VTC 1031/1031-C2

Fanless In-vehicle Telematics Computer

- Intel Atom® x6413E (Elkhart Lake) Quad Core processor, 9W
- Dual display outputs and 2.5GbE LAN port
- 5G NR and Wi-Fi 6/6E wireless communication options
- 2 x PoE support, total 60W (VTC 1031-C2)
- Optional equipped AI accelerator M.2/mini-PCIe module



nROK 1031-A/1031-AC2

Fanless Rolling Stock Telematics Computer

- Intel Atom® x6413E (Elkhart Lake) Quad Core processor, 9W
- 5G NR and Wi-Fi 6/6E wireless communication options
- Dual display outputs and 2.5GbE LAN M12 X-coded port
- 2 x PoE support, total 60W (nROK 1031-AC2)
- Optional equipped AI accelerator M.2/mini-PCIe module



VTC 7260-x/7260-xC4

Fanless AI Power Vehicle Computer

- 11th Gen Intel® Core™ i5-1145GRE/Core™ i7-1185GRE (Tiger Lake UP3)
- Compact, rugged and fanless design
- Rich I/Os, 4 x 2.5GbE PoE+ (VTC 7260-5C4/7C4), 3 x LAN (VTC 7260-5/7), 4 x USB 3.2/2.0 & 2 x RS232/422/485
- 1 x 2.5" SSD, 1 x mSATA and 1 x NVMe SSD for data integrity
- Up to 3 combinations of LTE/5G, Wi-Fi 5/6 for mobile router function



VTC 7270/7270-C4/7270-C8

Fanless AI Powered Vehicle Computer

- Powered by 12/13th Gen Intel® Core™ i with DDR5, excellent memory bandwidth, lower latency
- Rich I/Os, 4/8 x 2.5 GbE PoE+ (VTC 7270-C4/C8), 3 x LAN (VTC 7270), 6 x USB 3.2, 2 x CAN FD & 4 x Serials
- 2 x 2.5" SSD, 1 x NVMe ultra-speed SSD for data integrity
- Support 4 x 2.5GbE PoE+ (VTC 7270-C4) and ,8 x 2.5GbE PoE+ (VTC 7270-C8)



VES31-4S/-8S & VES31-4SR/-8SR

Unmanaged Gigabit Ethernet Switch with 4-port/8-port PoE

- 4/8 x 10/100/1000 Mbps PoE port (802.3af/at compliance)
- Smart power management with ignition control and power on/off delay
- Wide power input range 9 ~ 36VDC
- -40 ~ 70°C operating temperature
- E mark and EN50155 for in-vehicle and railway applications



VIP 1000-T/1000-R

Full HD HDMI Extender Over IP

- Plug and play
- 2 x Full HD HDMI output, up to 100 meter distance
- Unicast, daisy chain and multicast modes support
- Wide-range 9-36VDC input voltage with ignition control
- E mark for in-vehicle application

2023 New Products



ATC 3540/3520-IP7-4C/AI4CR

IP67 Accelerated Edge AI In-vehicle/Railway Computer

- Built-in NVIDIA® Jetson Orin™ NX SOM, up to 100 TOPS (INT8)
- Support 4-port GbE PoE
- HEVC/H.265 hardware DECODE@ 18 x 1080p30 performance
- Ultra-speed PCIe 3.0 x4 NVMe SSD, LTE/5G modem & Wi-Fi 5/6 expansion
- Operating temperature of -30~70°C



ATC 3750-6C/3750-A6CR

Accelerated Edge AI In-vehicle/Railway Computer

- Built-in NVIDIA® Jetson AGX Orin™ SOM, up to 200/275 TOPS (INT8) performance
- Designed with rugged, compact and hybrid thermal solutions
- 6-port GbE PoE+ for IP CAM/LiDAR sensors, optional 1-port 10GbE
- HEVC/H.265 hardware DECODE@ 6 x 4K30 performance
- E Mark and EN50155



VTC 1030

Fanless In-vehicle/Rolling Stock Computer

- Intel Atom® x6211E (Elkhart Lake) Dual Core processor, 6W
- Compact and fanless design with E Mark certification
- 5G NR and Wi-Fi 6/6E wireless communication options
- Built-in GNSS receiver
- Dual display outputs and 2.5GbE LAN ports



nROK 1030-A

Fanless Rolling Stock Computer

- Intel Atom® x6211E (Elkhart Lake) Dual Core processor, 6W
- Compact and fanless design with EN45545 and EN50155 certification
- 5G NR and Wi-Fi 6/6E wireless communication options
- Built-in GNSS receiver
- Dual display outputs and 2.5GbE LAN ports



VTC 1031/1031-C2

Fanless In-vehicle Telematics Computer

- Intel Atom® x6413E (Elkhart Lake) Quad Core processor, 9W
- Dual display outputs and 2.5GbE LAN port
- 5G NR and Wi-Fi 6/6E wireless communication options
- 2 x PoE support, total 60W (VTC 1031-C2)
- Optional equipped AI accelerator M.2/mini-PCIe module



nROK 1031-A/1031-AC2

Fanless Rolling Stock Telematics Computer

- Intel Atom® x6413E (Elkhart Lake) Quad Core processor, 9W
- 5G NR and Wi-Fi 6/6E wireless communication options
- Dual display outputs and 2.5GbE LAN M12 X-coded port
- 2 x PoE support, total 60W (nROK 1031-AC2)
- Optional equipped AI accelerator M.2/mini-PCIe module



VTC 7260-x/7260-xC4

Fanless AI Power Vehicle Computer

- 11th Gen Intel® Core™ i5-1145GRE/Core™ i7-1185GRE (Tiger Lake UP3)
- Compact, rugged and fanless design
- Rich I/Os, 4 x 2.5GbE PoE+ (VTC 7260-5C4/7C4), 3 x LAN (VTC 7260-5/7), 4 x USB 3.2/2.0 & 2 x RS232/422/485
- 1 x 2.5" SSD, 1 x mSATA and 1 x NVMe SSD for data integrity
- Up to 3 combinations of LTE/5G, Wi-Fi 5/6 for mobile router function



VTC 7270/7270-C4/7270-C8

Fanless AI Powered Vehicle Computer

- Powered by 12/13th Gen Intel® Core™ i with DDR5, excellent memory bandwidth, lower latency
- Rich I/Os, 4/8 x 2.5 GbE PoE+ (VTC 7270-C4/C8), 3 x LAN (VTC 7270), 6 x USB 3.2, 2 x CAN FD & 4 x Serials
- 2 x 2.5" SSD, 1 x NVMe ultra-speed SSD for data integrity
- Support 4 x 2.5GbE PoE+ (VTC 7270-C4) and ,8 x 2.5GbE PoE+ (VTC 7270-C8)



VES31-4S/-8S & VES31-4SR/-8SR

Unmanaged Gigabit Ethernet Switch with 4-port/8-port PoE

- 4/8 x 10/100/1000 Mbps PoE port (802.3af/at compliance)
- Smart power management with ignition control and power on/off delay
- Wide power input range 9 ~ 36VDC
- -40 ~ 70°C operating temperature
- E mark and EN50155 for in-vehicle and railway applications



VIP 1000-T/1000-R

Full HD HDMI Extender Over IP

- Plug and play
- 2 x Full HD HDMI output, up to 100 meter distance
- Unicast, daisy chain and multicast modes support
- Wide-range 9-36VDC input voltage with ignition control
- E mark for in-vehicle application

Industrial Edge AI Telematics Computer

ATC/aROK Series Brief Product Introduction

Product Description

AI has become an essential component of automated vehicle technologies. With built-in state of the art AI accelerator, ATC and aROK series are expertise for edge AI in-vehicle/railway applications. Besides, ATC/

aROK features with extreme wide-range operating temperature, military standard anti-vibration/shock and dust/water proof IP67 rating making it constantly perform 100% workload in harsh environments.

- NVIDIA® Jetson SOM, Quadro MXM/PCIe x16 AI accelerator support
- 5G/LTE, Wi-Fi 6/6E, BT, PoE, CAN function support

- EN50155 & E-Mark certification
- Optional railway isolated power input

Application

ATC: ADAS, ANPR, AMR, autonomous driving

aROK: Pantograph inspection, track obstacle inspection, traffic sign recognition

Product Highlight



Edge AI, inference accelerator



Sturdy system with securing cards/SOM for OHV and train



Strong ingress protection, IP65/IP67



MIPI SerDes solution support



aROK 5510







aROK 8110

| Model | aROK 5510 | aROK 8110 |
|------------------------|--|--|
| System | | |
| CPU | Intel® Coffee Lake S/ Refresh Core™/Xeon® | Intel® Coffee Lake S/ Refresh Core™/Xeon® |
| Chipset | Intel® C246 | Intel® C246 |
| Fan/Fanless | Fan (fan-kit pre-installed) | Fan (fan-kit pre-installed) |
| Memory | 4 x DDR4 2666 SO-DIMM, up to 32GB + 32GB + 32GB + 32GB | 2 x DDR4 2666 SO-DIMM, up to 32GB + 32GB |
| Storage | 6 x 2.5" SATA SSD (removable, 9.5mm) | 4 x 2.5" SATA 3.0 SSD/HDD (15mm height), or 3 x 2.5" SATA 3.0 SSD/HDD + 2 x M.2 2280/2242/2260 Key M NVMe SSD (PCIe 3.0 x2), or 3 x 2.5" SATA 3.0 SSD/HDD + 1 x U.2 NVMe SSD (PCIe 3.0 x2) |
| Second Storage | 1 x mSATA, 1 x M.2 2280/2242/2260 Key M NVMe SSD (PCIe 3.0 x4), 1 x Removable SD 3.0 | 1 x CFast (external accessible) |
| GPU/VP/TPU Coprocessor | One PCIe 3.0 x16 lane for optional NVIDIA Graphics card (100W) | One PCIe 3.0 x16 lane for optional NVIDIA Graphics card |
| Video Out | 1 x VGA, 1 x HDMI | 1 x VGA, 1 x HDMI |
| Audio | 1 x Mic-in, 2 x Line-out | 1 x Mic-in, 1 x Line-out |
| Ethernet | 2 x Intel® 10/100/1000 (M12), 2 x 10GbE SFP+ card (optional) | 2 x Intel® 10/100/1000 (M12) |
| PoE | 4 x M12 GbE independent (802.3at/af), Total 60W (optional) | Up to 3 x GEM640 card (optional), each card with 4 x M12 Intel® GbE (w/ 802.3at/af), Total 60W+60W+60W |
| I/O Interface | | |
| USB | 1 x M12 with 2 x USB 2.0 signal, 3 x USB 3.2 (Gen2), 1 x USB 3.2 (Gen1) | 1 x M12 with 2 x USB 2.0 signal, 3 x USB 3.2 (Gen2), 1 x USB 2.0 |
| COM | 2 x RS-232 (Full), 1 x RS232 (Full)/422/485. (w/ isolation) | 4 x RS232 (Full)/422/485. (w/ isolation) |
| DIO | 4 x DI, 4 x DO (w/ isolation) | 4 x DI, 4 x DO (w/ isolation) |
| CAN Bus | 1 x CAN Bus 2.0B (w/ isolation) | 1 x CAN Bus 2.0B (w/ isolation) |
| SIM Socket | 8 (BOM option up to 10, eSIM BOM optional) | 4 (eSIM BOM optional) |
| DC Output | N/A | N/A |
| MIPI Interface | N/A | N/A |
| WWAN | 4 (BOM option up to 5) | 2 |
| Expansion | | |
| mini-PCIe Socket | - 1 x (USB 2.0, PCIe 3.0) - 1 x (USB 2.0, PCIe 3.0). BOM option to 1 x mini-PCIe (USB 2.0) for LTE - 1 x (USB 2.0) for LTE. BOM option to 1 x M.2 3042/3050/3052 Key B (USB 2.0, USB 3.2 (Gen1)) for LTE/5G. | - 1 x (USB 2.0, PCIe 2.0) 1 x (USB 2.0) for LTE. BOM option to 1 x M.2 3042 Key B (USB 2.0) for LTE |
| M.2 Socket | 3 x M.2 3042/3050/3052 Key B (USB 2.0, USB 3.2 (Gen2)) for LTE/5G | 1 x M.2 3042/3050/3052 Key B (USB 2.0, USB 3.2 (Gen2)) for LTE/5G |
| Expansion PCIe Slot | PCIe x16 | 1 x PCIe x16, 3 x PCIe x4 |
| GNSS | VIOB-GPS-02 module (u-blox NEO-M8N) | VIOB-GPS-02 module (u-blox NEO-M8N) |
| Power Input | DC 24/110V (w/ isolation) | DC 24/36V (w/o isolation) |
| Environment | | |
| Ingress Protection | N/A | N/A |
| Certification | CE, FCC Class A, UKCA, EN50155 | CE, FCC Class A, UKCA, EN50155 |
| Operating Temperature | -40°C to 70°C (OT4) | -40°C to 70°C (OT4) |
| TPM | TPM 2.0 | TPM 2.0 |
| Others | | |
| OS | Win 10/11, Linux (Kernel 4.x) | Win 10/11, Linux (Kernel 4.x) |
| Dimensions (mm) | 483 x 400 x 95 | 215 x 205 x 385 |






Industrial Edge AI Telematics Computer

| Model |  |  |  |  |
|------------------------|---|---|---|---|
| | ATC 8010 | ATC 8010-F | ATC 8110 | ATC 8110-F |
| System | | | | |
| CPU | Intel® Coffee Lake S/ Refresh Core™/Xeon® | Intel® Coffee Lake S/Refresh Core™/Xeon® | Intel® Coffee Lake S/ Refresh Core™/Xeon® | Intel® Coffee Lake S/ Refresh Core™/Xeon® |
| Chipset | Intel® Q370 | Intel® Q370 | Intel® C246 | Intel® C246 |
| Fan/Fanless | Fanless | Fan (fan-kit pre-installed) | Fanless | Fan (fan-kit pre-installed) |
| Memory | 2 x DDR4 2400/2666 SO-DIMM, up to 32GB + 32GB | 2 x DDR4 2400/2666 SO-DIMM, up to 32GB + 32GB | 2 x DDR4 2400/2666 SO-DIMM, up to 32GB + 32GB | 2 x DDR4 2400/2666 SO-DIMM, up to 32GB + 32GB |
| Storage | 2 x 2.5" SATA 3.0 SSD (removable, 15mm) | 2 x 2.5" SATA 3.0 SSD (removable, 15mm) | 3 x 2.5" SATA 3.0 SSD/HDD (removable, 15mm) or 2 x 2.5" SATA 3.0 SSD/HDD + 1 x 2.5" U.2/NVMe M.2 2280 | 3 x 2.5" SATA 3.0 SSD/HDD (removable, 15mm) or 2 x 2.5" SATA 3.0 SSD/HDD + 1 x 2.5" U.2/NVMe M.2 2280 |
| Second Storage | 2 x mSATA (occupied mini-PCIe socket) | 2 x mSATA (occupied mini-PCIe socket) | 1 x CFast (external accessible) | 1 x CFast (external accessible) |
| GPU/VP/TPU Coprocessor | NVIDIA Quadro® MXM module (RTX A1000/RTX A2000) | NVIDIA Quadro® MXM module, Quadro (RTX A4500) | One 3-slot width PCIe 3.0 x16 lane for optional NVIDIA Graphics card | One 3-slot width PCIe 3.0 x16 lane for optional NVIDIA Graphics card |
| Video Out | 1 x VGA, * 5 x HDMI, 1 x ultraONE+ | 1 x VGA, * 5 x HDMI, 1 x ultraONE+ | 1 x VGA, 1 x HDMI | 1 x VGA, 1 x HDMI |
| Audio | 1 x Mic-in, 1 x Line-out | 1 x Mic-in, 1 x Line-out | 1 x Mic-in, 1 x Line-out | 2 x Mic-in, 2 x Line-out |
| Ethernet | 1 x Intel® 10/100/1000 | 1 x Intel® 10/100/1000 | 2 x Intel® 10/100/1000 | 2 x Intel® 10/100/1000 |
| PoE | 8 x Independent Intel® 10/100/1000 (w/ 802.3at/af). Total 60W | 8 x Independent Intel® 10/100/1000 (w/ 802.3at/af). Total 60W | N/A | N/A |
| USB | 6 x USB 3.2 (Gen2) | 6 x USB 3.2 (Gen2) | 5 x USB 3.2 (Gen2), 1 x USB2.0 | 5 x USB 3.2 (Gen2), 1 x USB2.0 |
| COM | 2 x RS232 (Full), 1 x RS232 (Full)/422/485 | 2 x RS232 (Full), 1 x RS232 (Full)/422/485 | 4 x RS232 (Full)/422/485 | 4 x RS232 (Full)/422/485 |
| DIO | 4 x DI, 4 x DO | 4 x DI, 4 x DO | 4 x DI (w/ isolation) 4 x DO (w/ isolation) | 4 x DI (w/ isolation) 4 x DO (w/ isolation) |
| CAN Bus | 1 x CAN Bus 2.0B (w/ isolation) | 1 x CAN Bus 2.0B (w/ isolation) | 1 x CAN Bus 2.0B (w/ isolation) | 1 x CAN Bus 2.0B (w/ isolation) |
| SIM Socket | 3 (eSIM BOM optional) | 3 (eSIM BOM optional) | 4 (eSIM BOM optional) | 4 (eSIM BOM optional) |
| DC Output | 12V (2A) | 12V (2A) | 12V (2A) | 12V (2A) |
| MIPI Interface | N/A | N/A | N/A | N/A |
| WWAN | 2 | 2 | 2 | 2 |
| mini-PCIe Socket | - 1 x (USB 2.0) for LTE - 1 x (USB 2.0, PCIe 3.0/SATA 3.0) - 1 x (USB 2.0, PCIe 3.0/SATA 3.0) | - 1 x (USB 2.0) for LTE - 1 x (USB 2.0, PCIe 3.0/SATA 3.0) - 1 x (USB 2.0, PCIe 3.0/SATA 3.0) | - 1 x (USB 2.0) for LTE - 1 x (USB 2.0, PCIe 2.0) | - 1 x (USB 2.0) for LTE - 1 x (USB 2.0, PCIe 2.0) |
| M.2 Socket | 1 x M.2 3042 Key B (USB 2.0, USB 3.2 (Gen1)) for LTE/5G | 1 x M.2 3042 Key B (USB 2.0, USB 3.2 (Gen1)) for LTE/5G | 1 x M.2 3042/3052 Key B (USB 2.0, USB 3.2 (Gen1)) for LTE/5G | 1 x M.2 3042/3052 Key B (USB 2.0, USB 3.2 (Gen1)) for LTE/5G |
| Expansion PCIe Slot | N/A | N/A | 1 x PCIe x16, 1 x PCIe x4 + proprietary, 1 x PCIe x4 | 1 x PCIe x16, 1 x PCIe x4 + proprietary, 1 x PCIe x4 |
| GNSS | VIOB-GPS-02 module (u-blox NEO-M8N) | VIOB-GPS-02 module (u-blox NEO-M8N) | VIOB-GPS-02 module (u-blox NEO-M8N) | VIOB-GPS-02 module (u-blox NEO-M8N) |
| Power Input | DC 9V to 36V | DC 9V to 36V | DC 9V to 36V | DC 9V to 36V |
| Environment | | | | |
| Ingress Protection | N/A | N/A | N/A | N/A |
| Certification | CE, FCC Class A, UKCA, E13 | CE, FCC Class A, UKCA, E13 | CE, FCC Class A, UKCA, E13 | CE, FCC Class A, UKCA, E13 |
| Operating Temperature | -30°C to 60°C | -30°C to 60°C | -30°C to 60°C | -30°C to 60°C |
| TPM | TPM 2.0 | TPM 2.0 | TPM 2.0 | TPM 2.0 |
| Others | | | | |
| OS | Win 10/11, Linux (Kernel 4.x) | Win 10/11, Linux (Kernel 4.x) | Win 10/11, Linux (Kernel 4.x) | Win 10/11, Linux (Kernel 4.x) |
| Dimensions (mm) | 260 x 259.7 x 90.1 | 260 x 259.7 x 99 (w/ fan kit) | 191.2 x 176 x 350 | 207.4 x 176 x 350 (w/ fan kit) |



Based on different MXM for ATC 8010 and ATC 8010-F, the quantity will be different.

Product appearance and specifications are subject to change without notice.

| Model |  |  |  |
|------------------------|---|---|---|
| | ATC 3200 | ATC 3530-IP7-4M | ATC 3530-IP7-4C |
| System | | | |
| CPU | NVIDIA® Tegra X2 2 Core NVIDIA Denver2 and 4 Core ARM A57 | NVIDIA® Jetson Xavier™ NX 3 x 2-core Carmel CPU@1.9GHz | NVIDIA® Jetson Xavier™ NX 3 x 2-core Carmel CPU@1.9GHz |
| Chipset | N/A | N/A | N/A |
| Fan/Fanless | Fanless | Fanless | Fanless |
| Memory | Onboard LPDDR4 1600MHz, 8GB, 59.7GB/s | Onboard 128-bit LPDDR4, 8GB/16GB, 59.7GB/s | Onboard 128-bit LPDDR4, 8GB/16GB, 59.7GB/s |
| Storage | 32GB eMMC 5.1 | 16GB eMMC 5.1 | 16GB eMMC 5.1 |
| Second Storage | 1 x Removable microSD 1 x 2.5" SATA 3.0 SSD (15mm height) | 1 x Removable microSD 1 x M.2 2280 Key M NVMe SSD (PCIe 3.0 x4) | 1 x Removable microSD 1 x M.2 2280 Key M NVMe SSD (PCIe 3.0 x4) |
| GPU/VP/TPU Coprocessor | NVIDIA Pascal 256-core integrated GPU @1.2GHz | NVIDIA Volta 384-core, 48 Tensor-core integrated GPU @1.1GHz | NVIDIA Volta 384-core, 48 Tensor-core integrated GPU @1.1GHz |
| Video Out | 1 x HDMI | 1 x HDMI | 1 x HDMI |
| Audio | 1 x Mic-in, 1 x Line-out | N/A | N/A |
| Ethernet | N/A | 2 x Intel® 10/100/1000 (M12 X-coded) | 1 x Intel® 10/100/1000 (M12 X-coded) |
| PoE | 2 x Independent Intel® 10/100/1000 (802.3af/at). Total 30W | Option for PoE (w/ 802.3af/at). Total 30W | 4 x GbE M12 X-coded (802.3af/at). Total 30W |
| USB | 2 x USB 3.2 (Gen1), 1 x USB 2.0, 1 x OTG | 2 x USB 3.2 (Gen1), 1 x OTG | 2 x USB 3.2 (Gen1), 1 x OTG |
| COM | 2 x RS232 (Tx, Rx)/ 422/485, 1 x Console | 1 x RS232 (Tx, Rx), 1 x RS232 (Tx, Rx, RTS, CTS), 1 x Console | 1 x RS232 (Tx, Rx), 1 x RS232 (Tx, Rx, RTS, CTS), 1 x Console |
| DIO | 4 x DI (w/ isolation) 4 x DO (w/ isolation) | 4 x DI 4 x DO | 4 x DI 4 x DO |
| CAN Bus | 1 x CAN Bus 2.0B (w/ isolation) | 1 x CAN Bus 2.0B (w/ isolation) | 1 x CAN Bus 2.0B (w/ isolation) |
| SIM Socket | 2 | 2 | 2 |
| DC Output | 12V(2A) & 5V(1A) | N/A | N/A |
| MIPI Interface | 4 (V-by-One HS) | 4 (Thine, V-by-One HS) | N/A |
| WWAN | 1 | 1 | 1 |
| mini-PCIe Socket | 1 x (USB 2.0, PCIe 2.0) | 1 x (USB 2.0, PCIe 3.0) | 1 x (USB 2.0, PCIe 3.0) |
| M.2 Socket | 1 x M.2 3042/3052 Key B (USB 2.0, USB 3.2 (Gen1)) for LTE/5G | 1 x M.2 3042/3052 Key B (USB 2.0, USB 3.2 (Gen1)) for LTE/5G | 1 x M.2 3042/3052 Key B (USB 2.0, USB 3.2 (Gen1)) for LTE/5G |
| Expansion PCIe Slot | N/A | N/A | N/A |
| GNSS | VIOB-GPS-02 module (u-blox NEO-M8N) | VIOB-GPS-02 module (u-blox NEO-M8N) | VIOB-GPS-02 module (u-blox NEO-M8N) |
| Power Input | DC 9V to 36V | DC 9V to 36V | DC 9V to 36V |
| Environment | | | |
| Ingress Protection | IP50 | IP67 | IP67 |
| Certification | CE, FCC Class A, UKCA, E13 | CE, FCC Class A, UKCA, E13 | CE, FCC Class A, UKCA, E13 |
| Operating Temperature | -30°C to 70°C | -30°C to 70°C (SoM @10W TDP, w/ 30W PoE PSE) | -30°C to 70°C (SoM @10W TDP, w/ 30W PoE PSE) |
| TPM | N/A | N/A | N/A |
| Others | | | |
| OS | JetPack 4.4 BSP w/ Ubuntu 18.04 (L4T) | BSP w/ JetPack 4.6, Ubuntu 18.04 @Kernel 4.9.140 | BSP w/ JetPack 4.6, Ubuntu 18.04 @kernel 4.9.140 |
| Dimensions (mm) | 180 x 156 x 60 | 213 x 167 x 82.8 | 213.0 x 167.0 x 82.8 |








Product appearance and specifications are subject to change without notice.

Industrial Edge AI Telematics Computer

Industrial Edge AI Telematics Computer





Industrial Edge AI Telematics Computer

| Model |  |  |  |  |  |
|----------------------|---|---|---|--|---|
| | ATC 3540-IP7-4C | ATC3540-IP7-AI4CR (Rail) | ATC 3750-6C | ATC 3750-A6CR (Rail) | ATC 3750-IP7-8M |
| System | <p>CPU NVIDIA® Jetson Orin™ NX 6-core/8-core Carmel CPU@2.0GHz</p> <p>Chipset N/A</p> <p>Fan/Fanless Fanless</p> <p>Memory Onboard 128-bit LPDDR5, 8GB/16GB, 102GB/s</p> <p>Storage N/A</p> <p>Second Storage 1 x M.2 2280 Key M NVMe SSD (PCIe 4.0 x4)</p> <p>GPU/VPU/TPU Coprocessor NVIDIA Ampere 1024-core, 32 Tensor-core integrated GPU @918MHz</p> <p>Video Out 1 x HDMI</p> <p>Audio N/A</p> | | | | |
| I/O Interface | <p>Ethernet 1 x Intel® 10/100/1000 (M12 X-coded)</p> <p>PoE 4 x GbE M12 X-coded (802.3at/af). Total 30W</p> <p>USB 2 x USB 3.2 (Gen1), 1 x OTG</p> <p>COM 1 x RS232 (Tx, Rx), 1 x RS232 (Tx, Rx, RTS, CTS)</p> <p>DIO 4 x DI, 4 x DO</p> <p>CAN Bus 1 x CAN Bus 2.0B (w/ isolation)</p> <p>SIM Socket 2</p> <p>DC Output N/A</p> <p>MIPI Interface N/A</p> <p>WWAN 1</p> <p>mini-PCIe Socket 1 x (USB 2.0, PCIe 4.0)</p> | | | | |
| Expansion | <p>M.2 Socket - 1 x M.2 3042/3052 Key B (USB 2.0, USB 3.2 (Gen1)) for LTE/5G</p> <p>Expansion PCIe Slot N/A</p> <p>GNSS VIOB-GPS-06 module (u-blox NEO-M9N)</p> <p>Power Input DC 9V to 36V</p> | | | | |
| Environment | <p>Ingress Protection IP67</p> <p>Certification CE, FCC Class A, UKCA, E13</p> <p>Operating Temperature -30°C to 70°C (SoM @10W~25W TDP, w/ 30W PoE PSE)</p> <p>TPM N/A</p> <p>OS BSP w/ JetPack 5.1.1, Ubuntu 20.04 @kernel 5.10</p> | | | | |
| Others | <p>Dimensions (mm) 213.0 x 167.0 x 82.8</p> | | | | |



Based on different MXM for ATC 8010 and ATC 8010-F, the quantity will be different.

Product appearance and specifications are subject to change without notice.

| Model |  |  |  |  |
|----------------------|---|---|---|---|
| | ATC 3520-IP7-4C | ATC3520-IP7-AI4CR (Rail) | ATC 3520-IP7-3M | ATC 3540-IP7-3M |
| System | <p>CPU NVIDIA® Jetson Orin™ Nano 6-core Arm® Cortex®-A78AE 64-bit</p> <p>Chipset N/A</p> <p>Fan/Fanless Fanless</p> <p>Memory Onboard 4GB/8GB 64-bit/128-bit LPDDR5, 2133MHz</p> <p>Storage N/A</p> <p>Second Storage 1 x M.2 2280 Key M NVMe SSD (PCIe 4.0 x4)</p> <p>GPU/VPU/TPU Coprocessor NVIDIA Ampere 512/1024-core, 16/32 Tensor-core integrated GPU @625MHz</p> <p>Video Out 1 x HDMI</p> <p>Audio N/A</p> | | | |
| I/O Interface | <p>Ethernet 1 x Intel® 10/100/1000 (M12 X-coded)</p> <p>PoE 4 x GbE M12 X-coded (802.3at/af). Total 30W</p> <p>USB 2 x USB 3.2 (Gen1), 1 x OTG</p> <p>COM 1 x RS232 (Tx, Rx), 1 x RS232 (Tx, Rx, RTS, CTS)</p> <p>DIO 4 x DI, 4 x DO</p> <p>CAN Bus 1 x CAN Bus 2.0B (w/ isolation)</p> <p>SIM Socket 2</p> <p>DC Output N/A</p> <p>MIPI Interface N/A</p> <p>WWAN 1</p> <p>mini-PCIe Socket 1 x (USB 2.0, PCIe 4.0)</p> | | | |
| Expansion | <p>M.2 Socket - 1 x M.2 3042/3052 Key B (USB 2.0, USB 3.2 (Gen1)) for LTE/5G</p> <p>Expansion PCIe Slot N/A</p> <p>GNSS VIOB-GPS-06 module (u-blox NEO-M9N)</p> <p>Power Input DC 9V to 36V</p> | | | |
| Environment | <p>Ingress Protection IP67</p> <p>Certification CE, FCC Class A, UKCA, E13</p> <p>Operating Temperature -30°C to 70°C (SoM @7W/10W/15W TDP, w/ 30W PoE PSE)</p> <p>TPM N/A</p> <p>OS BSP w/ JetPack 5.1.1, Ubuntu 20.04 @kernel 5.10</p> | | | |
| Others | <p>Dimensions (mm) 213.0 x 167.0 x 82.8</p> | | | |



Product appearance and specifications are subject to change without notice.



Vehicle Telematics Computer



VTC Series Brief Product Introduction

Product Description

VTC and MVS series are fanless embedded telematics system which can sustain in harsh environment, with rich I/O connectivity for external peripherals, and easy RF communication expansion. The modular design makes the

MVS series very flexible to adopt other expansion boards and thus extend I/O functions. Besides, we provide MUT (MCU Utility Tools) SDK for power management & control, which greatly reduces Time-To-Market.

-  5G/LTE, Wi-Fi 6/6E, BT, CAN/OBD module support
-  IP65/67 ingress protection

-  Ignition power management
-  AI accelerator module support

Application

- Fleet management
- Vehicle gateway
- Video surveillance
- Passenger information system
- Infotainment applications.

Product Highlight



Rugged design for harsh environment







Flexible RF communication expansion



Dead reckoning & RTK precise positioning







802.3 af/at PoE+ support




| Model |  |  |  Coming soon |  |
|-----------------------|---|---|---|---|
| | VTC 210 | VTC 1910-S | VTC 1920 | VTC 1911-IPK |
| System | | | | |
| CPU | Rockchip RK3328 | Intel Atom® E3815, 1 Core, 1.46GHz | Intel Atom® x7211RE, 2 Core, 2.9GHz | Intel Atom® E3815, 1 Core, 1.46GHz |
| Chipset | N/A | N/A | N/A | N/A |
| Memory | DDR4 2GB onboard, up to 4GB | 1 x DDR3L 1600 SO-DIMM, 4GB (default) up to 8GB | 1 x DDR4 3200 SO-DIMM, 4GB (default) up to 16GB, in-band ECC support | 1 x DDR3L 1600 SO-DIMM, 4GB (default) up to 8GB |
| Storage | eMMC 5.1, 16GB | 1 x SATA 2.0 mSATA | 1 x M.2 2242 Key M SSD (SATA 3.0) | 1 x SATA 2.0 mSATA |
| Second Storage | 1 x Micro SD | 1 x SATA DOM | N/A | 1 x 2.5" SSD (9.5mm) or 1 x SATA DOM |
| Video Out | 1 x HDMI | 1 x VGA | 1 x HDMI | 1 x VGA, 1 x HDMI (optional) |
| Audio | N/A | 1 x Mic-in, 1 x Line-out | 1 x Mic-in, 1 x Line-out | 1 x Mic-in, 1 x Line-out |
| Ethernet | 2 x 10/100/1000 LAN switch | 1 x Intel® 10/100/1000 | 1 x Intel® 10/100/1000/2500 | 2 x Intel® 10/100/1000 |
| PoE | N/A | N/A | N/A | N/A |
| I/O Interface | | | | |
| USB | 1 x External USB 2.0, 1 x Internal USB 2.0 for Wi-Fi | 1 x USB 3.0, 1 x USB 2.0 | 2 x USB 3.2 (Gen 2) | 1 x USB 2.0 |
| COM | 1 x RS232 (full) | 2 x RS232 (Tx, Rx), 1 x RS485 | 2 x RS232 (Tx, Rx), 1 x RS485 | 2 x RS232 (Tx, Rx), 1 x RS485 |
| DIO | N/A | 3 x DI, 3 x DO | 3 x DI, 3 x DO | 3 x DI, 3 x DO |
| CAN Bus | N/A | 1 x CAN Bus 2.0B | 1 x CAN FD | 1 x CAN Bus 2.0B |
| DC Output | N/A | N/A | N/A | N/A |
| SIM Socket | 1 | 2 | 2 | 2 |
| Expansion | | | | |
| WWAN | 1 | 1 | 1 | 1 |
| mini-PCIe Socket | N/A | - 1 x (PCIe 2.0/SATA 2.0) - 1 x (USB 2.0) for LTE | - 1 x (USB 2.0) for Wi-Fi - BOM option to 1 x M.2 3052 Key B socket (USB 2.0) for LTE | - 1 x (USB 2.0, PCIe 2.0/SATA 2.0) - 1 x (USB 2.0) for LTE |
| M.2 Socket | - 1 x M.2 3042 Key B (USB 2.0, USB 3.2 (Gen1)) for LTE | N/A | - 1 x M.2 3042/3050/3052 Key B (USB 2.0, USB 3.2 (Gen 2)) for LTE/5G - 1 x M.2 2230 Key E (USB 2.0, PCIe 3.0 x1) | N/A |
| GNSS | VI0B-GPS-06 module (u-blox NEO-M9N) | Onboard u-blox NEO-M8N | Onboard u-blox NEO-M9N | Onboard u-blox NEO-M8N |
| Power | | | | |
| Power Input | DC 9V to 36V | DC 9V to 36V | DC 9V to 36V | DC 9V to 36V |
| Back Up Battery | N/A | N/A | N/A | N/A |
| Environment | | | | |
| Ingress Protection | N/A | N/A | N/A | IP67 |
| Certification | CE, FCC Class A, UKCA, E13 | CE, FCC Class A, E13 | CE, FCC Class A, E13 | CE, FCC Class A, E13, EN50155 |
| Operating Temperature | -20°C to 70°C | -40°C to 70°C | -40°C to 70°C | -40°C to 70°C |
| Others | | | | |
| TPM | N/A | TPM 2.0 | TPM 2.0 | TPM 2.0 |
| OS | Linux | Win 10, Win 8, Win 7, WES 7, Linux (Kernel 4.x) | Win 10, Win 11, Linux (Kernel 4.x) | Win 10, Win 8, Win 7, WES 7, Linux (Kernel 4.x) |
| Dimensions (mm) | 130 x 100 x 31 | 130 x 120 x 32 | 130 x 120 x 32 | 185 x 167 x 56.5 |



Vehicle Telematics Computer




| Model |  |  |  |  |
|-----------------------|---|---|--|---|
| | VTC 1011-C2K | VTC 1011-C2VK | VTC 1020 | VTC 1020-PA |
| System | | | | |
| CPU | Intel Atom® E3825, 2 Core, 1.33GHz | Intel Atom® E3825, 2 Core, 1.33GHz | Intel Atom® x5-E3930, 2 Core, 1.8GHz | Intel Atom® x5-E3930, 2 Core, 1.8GHz |
| Chipset | N/A | N/A | N/A | N/A |
| Memory | 1 x DDR3L 1600 SO-DIMM, 4GB (default) up to 8GB | 1 x DDR3L 1600 SO-DIMM, 4GB (default) up to 8GB | 1 x DDR3L 1866 SO-DIMM, 4GB (default) up to 8GB | 1 x DDR3L 1866 SO-DIMM, 4GB (default) up to 8GB |
| Storage | 1 x 2.5" SATA 2.0 SSD (9.5mm) | 1 x 2.5" SATA 2.0 SSD (9.5mm) | 1 x 2.5" SATA 3.0 SSD (9.5mm) | 1 x 2.5" SATA 3.0 SSD (15mm) |
| Second Storage | 1 x mSATA (occupied mini-PCIe socket) | 1 x mSATA (occupied mini-PCIe socket) | 1 x mSATA (occupied mini-PCIe socket) | 1 x mSATA (occupied mini-PCIe socket) |
| I/O Interface | | | | |
| Video Out | 1 x VGA, 1 x HDMI | 1 x VGA, 1 x HDMI, 1 x ultraONE+ | 1 x VGA, 1 x HDMI | 1 x VGA, 1 x HDMI, 1 x LVDS |
| Audio | 1 x Mic-in, 1 x Line-out | 1 x Mic-in, 1 x Line-out | 1 x Mic-in, 1 x Line-out | 1 x Mic-in, 3 x Line-out (selectable) |
| Ethernet | 2 x Intel® 10/100/1000 (exclusion with PoE) | 2 x Intel® 10/100/1000 (exclusion with PoE) | 1 x Intel® 10/100/1000 | 1 x Intel® 10/100/1000 |
| PoE | 2 x Intel® 10/100/1000 (w/ 802.3at/af). Total 30W | 2 x Intel® 10/100/1000 (w/ 802.3at/af). Total 30W | N/A | N/A |
| USB | 2 x USB 2.0 | 2 x USB 2.0 | 2 x USB 3.2 (Gen1) | 2 x USB 3.2 (Gen1) |
| COM | 1 x RS232 (Full), 1 x RS232 (Tx, Rx)/RS422/485 | 1 x RS232 (Full), 1 x RS232 (Tx, Rx)/RS422/485 | 5 x RS232 (Tx, Rx), 2 x RS485 | 5 x RS232 (Tx, Rx), 2 x RS485 |
| DIO | 4 x DI, 4 x DO | 4 x DI, 4 x DO | 5 x Programmable DIO | 5 x Programmable DIO |
| CAN Bus | 1 x CAN Bus 2.0B | 1 x CAN Bus 2.0B | 1 x CAN Bus 2.0B | 1 x CAN Bus 2.0B |
| DC Output | 12V (2A) | 12V (2A) | 12V (2A) | 12V (2A) |
| SIM Socket | 2 | 2 | 1 | 1 |
| WWAN | 1 | 1 | 1 | 1 |
| Expansion | | | | |
| mini-PCIe Socket | - 1 x (USB 2.0, PCIe 2.0/ SATA 2.0) - 1 x (USB 2.0) for LTE | - 1 x (USB 2.0, PCIe 2.0/ SATA 2.0) - 1 x (USB 2.0) for LTE | - 1 x (USB 2.0, PCIe 2.0/ SATA 3.0) - 1 x (USB 2.0) for LTE | - 1 x (USB 2.0, PCIe 2.0/ SATA 3.0) - 1 x (USB 2.0) for LTE |
| M.2 Socket | N/A | N/A | N/A | N/A |
| GNSS | VIOB-GPS-02 module (u-blox NEO-M8N) | VIOB-GPS-02 module (u-blox NEO-M8N) | VIOB-GPS-02 module (u-blox NEO-M8N) | VIOB-GPS-02 module (u-blox NEO-M8N) |
| Power | | | | |
| Power Input | DC 9V to 36V | DC 9V to 36V | DC 9V to 36V | DC 9V to 36V |
| Back Up Battery | N/A | N/A | N/A | N/A |
| Environment | | | | |
| Ingress Protection | N/A | N/A | N/A | N/A |
| Certification | CE, FCC Class A, UKCA, E13 | CE, FCC Class A, UKCA, E13 | CE, FCC Class A, UKCA, E13 | CE, FCC Class A, UKCA, E13 |
| Operating Temperature | -40°C to 70°C (LAN mode) -40°C to 60°C (PoE mode) | -40°C to 70°C (LAN mode) -40°C to 60°C (PoE mode) | -40°C to 70°C | -40°C to 70°C |
| Others | | | | |
| TPM | TPM 2.0 | TPM 2.0 | TPM 2.0 | TPM 2.0 |
| OS | Win 10, Win 8, Win 7, WES 7, Linux (Kernel 4.x) | Win 10, Win 8, Win 7, WES 7, Linux (Kernel 4.x) | Win 10, Linux (Kernel 4.x) | Win 10, Linux (Kernel 4.x) |
| Dimensions (mm) | 185 x 150.9 x 45 | 185 x 150.9 x 45 | 185 x 120 x 45 | 185 x 120 x 50 |







| Model |  |  |  |
|-----------------------|--|--|--|
| | VTC 1010 | VTC1021-BK | VTC1021-C2K |
| System | | | |
| CPU | Intel Atom® E3827, 2 Core, 1.75GHz | Intel Atom® x5-E3940, 4 Core, 1.8GHz | Intel Atom® x5-E3940, 4 Core, 1.8GHz |
| Chipset | N/A | N/A | N/A |
| Memory | 1 x DDR3L 1333 SO-DIMM, 4GB (default) up to 8GB | 1 x DDR3L 1866 SO-DIMM, 4GB (default) up to 8GB | 1 x DDR3L 1866 SO-DIMM, 4GB (default) up to 8GB |
| Storage | 1 x 2.5" SATA 2.0 SSD (9.5mm) | 1 x 2.5" SATA 3.0 SSD (9.5mm) | 1 x 2.5" SATA 3.0 SSD (9.5mm) |
| Second Storage | 1 x SD, mini-PCIe (occupied mini-PCIe socket) | 1 x mSATA (occupied mini-PCIe socket) | 1 x mSATA (occupied mini-PCIe socket) |
| I/O Interface | | | |
| Video Out | 1 x VGA, 1 x DP | 1 x VGA, 1 x HDMI | 1 x VGA, 1 x HDMI |
| Audio | 2 x Mic-in, 2 x Line-out | 1 x Mic-in, 1 x Line-out | 1 x Mic-in, 1 x Line-out |
| Ethernet | 1 x Intel® 10/100/1000 | 2 x Intel® 10/100/1000 | 2 x Intel® 10/100/1000 |
| PoE | N/A | N/A | 2 x Intel® 10/100/1000 (w/ 802.3at/af). Total 60W |
| USB | 1 x USB 3.2 (Gen1), 2 x USB 2.0 | 1 x USB 3.2 (Gen1), 2 x USB 2.0 | 1 x USB 3.2 (Gen1), 2 x USB 2.0 |
| COM | 2 x RS232 (Full), 1 x RS422/485 | 1 x RS232 (Full), 1 x RS232 (Tx, Rx), 1 x RS422/485 | 1 x RS232 (Full), 1 x RS232 (Tx, Rx), 1 x RS422/485 |
| DIO | 6 x Programmable DIO | 3 x DI, 3 x DO | 3 x DI, 3 x DO |
| CAN Bus | 1 x CAN Bus 2.0B | 1 x CAN Bus 2.0B | 1 x CAN Bus 2.0B |
| DC Output | 12V (1A) | 12V (2A) | 12V (2A) |
| SIM Socket | 2 | 2 | 2 |
| WWAN | 2 | 1 | 1 |
| Expansion | | | |
| mini-PCIe Socket | - 2 x (USB 2.0, PCIe 2.0) - 1 x (SATA or (USB 2.0 + PCIe)) - 1 x (USB 2.0) for LTE | - 1 x (USB 2.0, PCIe 2.0/SATA 3.0) - 1 x (USB 2.0, PCIe 2.0) - 1 x (USB 2.0) for LTE | - 1 x (USB 2.0, PCIe 2.0/SATA 3.0) - 1 x (USB 2.0, PCIe 2.0) - 1 x (USB 2.0) for LTE |
| M.2 Socket | N/A | N/A | N/A |
| GNSS | VIOB-GPS-02 module (u-blox NEO-M8N) | Onboard u-blox NEO-M8N | Onboard u-blox NEO-M8N |
| Power | | | |
| Power Input | DC 9V to 36V | DC 9V to 36V | DC 9V to 36V |
| Back Up Battery | N/A | Optional | N/A |
| Environment | | | |
| Ingress Protection | N/A | N/A | N/A |
| Certification | CE, FCC Class B, UKCA, E13 | CE, FCC Class B, UKCA, E13 | CE, FCC Class B, UKCA, E13 |
| Operating Temperature | -30°C to 70°C | -40°C to 70°C | -40°C to 70°C |
| Others | | | |
| TPM | N/A | TPM 2.0 | TPM 2.0 |
| OS | Win 10, Win 8, Win 7, WES 7, Linux (Kernel 4.x) | Win 10, Linux (Kernel 4.x) | Win 10, Linux (Kernel 4.x) |
| Dimensions (mm) | 180 x 180 x 50 | 180 x 180 x 50 | 180 x 180 x 50 |



Vehicle Telematics Computer

| Model |  NEW VTC 1030 |  NEW VTC 1031 |  NEW VTC 1031-C2 |
|-----------------------|---|---|---|
| System | | | |
| CPU | Intel Atom® x6211E, 2 Core, 3.0GHz | Intel Atom® x6413E, 4 Core, 3.0GHz | Intel Atom® x6413E, 4 Core, 3.0GHz |
| Chipset | N/A | N/A | N/A |
| Memory | 1 x DDR4 2666 SO-DIMM, 4GB (default) up to 3200MHz 32GB, in-band ECC support | 1 x DDR4 2666 SO-DIMM, 4GB (default) up to 3200MHz 32GB, in-band ECC support | 1 x DDR4 2666 SO-DIMM, 4GB (default) up to 3200MHz 32GB, in-band ECC support |
| Storage | 1 x 2.5" SATA 3.0 SSD (9.5mm) | 1 x 2.5" SATA 3.0 SSD (9.5mm) | 1 x 2.5" SATA 3.0 SSD (9.5mm) |
| Second Storage | 1 x mSATA (occupied mini-PCIe socket) | 1 x M.2 2280 Key M SSD (SATA 3.0) | 1 x M.2 2280 Key M SSD (SATA 3.0) |
| Video Out | 1 x VGA, 1 x HDMI | 1 x VGA, 1 x HDMI | 1 x VGA, 1 x HDMI |
| Audio | 1 x Mic-in, 1 x Line-out | 1 x Mic-in, 1 x Line-out | 1 x Mic-in, 1 x Line-out |
| Ethernet | 2 x Intel® 10/100/1000/2500 | 1 x Intel® 10/100/1000/2500 1 x 10/100/1000 | 1 x Intel® 10/100/1000/2500 1 x 10/100/1000 |
| PoE | N/A | N/A | 2 x Independent Intel® 10/100/1000 (w/ 802.3at/af). Total 60W |
| USB | 2 x USB 3.2 (Gen 2) | 1 x USB 3.2 (Gen 2), 3 x USB 2.0 | 1 x USB 3.2 (Gen 2), 3 x USB 2.0 |
| COM | 2 x RS232 (full)/422/485 | 1 x RS232 (full)/422/485, 1 x RS232 (Tx, Rx), 2 x RS485 | 1 x RS232 (full)/422/485, 1 x RS232 (Tx, Rx), 2 x RS485 |
| DIO | 5 x DI, 4 x DO | 5 x DI, 4 x DO | 5 x DI, 4 x DO |
| CAN Bus | 1 x CAN Bus 2.0B (w/ isolation) | 1 x CAN Bus 2.0B (w/ isolation) | 1 x CAN Bus 2.0B (w/ isolation) |
| DC Output | 12V (2A) | 12V (2A) | 12V (2A) |
| SIM Socket | 2 | 2 | 2 |
| WWAN | 1 | 1 | 1 |
| mini-PCIe Socket | 1 x (USB 2.0, PCIe 3.0/SATA 3.0) | - 1 x (USB 2.0, PCIe 3.0) - BOM option to 1 x M.2 3042 Key B socket (USB 2.0, USB 3.2 Gen 2x1) for LTE/5G NR | - 1 x (USB 2.0, PCIe 3.0) - BOM option to 1 x M.2 3042 Key B socket (USB 2.0, USB 3.2 Gen 2x1) for LTE/5G NR |
| M.2 Socket | - 1 x M.2 3042/3050/3052 Key B (USB 2.0, USB 3.2 (Gen 2)) for LTE/5G - 1 x M.2 2230 Key E (USB 2.0, PCIe 3.0 x2) BOM option to 1 x M.2 2230 Key E (USB 2.0, PCIe 3.0, PCIe 3.0) | - 1 x M.2 3042/3050/3052 Key B (USB 2.0, USB 3.2 (Gen 2)) for LTE/5G - 1 x M.2 2230 Key E (USB 2.0, PCIe 3.0 x2) BOM option to 1 x M.2 2230 Key E (USB 2.0, PCIe 3.0, PCIe 3.0) | - 1 x M.2 3042/3050/3052 Key B (USB 2.0, USB 3.2 (Gen 2)) for LTE/5G - 1 x M.2 2230 Key E (USB 2.0, PCIe 3.0 x2) BOM option to 1 x M.2 2230 Key E (USB 2.0, PCIe 3.0, PCIe 3.0) |
| GNSS | VIOB-GPS-06 module (u-blox NEO-M9N) | VIOB-GPS-06 module (u-blox NEO-M9N) | VIOB-GPS-06 module (u-blox NEO-M9N) |
| Power Input | DC 9V to 36V | DC 9V to 36V | DC 9V to 36V |
| Back Up Battery | N/A | N/A | N/A |
| Ingress Protection | N/A | N/A | N/A |
| Certification | CE, FCC Class A, UKCA, E13 | CE, FCC Class A, UKCA, E13 | CE, FCC Class A, UKCA, E13 |
| Operating Temperature | -40°C to 70°C | -40°C to 70°C | -40°C to 70°C |
| TPM | TPM 2.0 | TPM 2.0 | TPM 2.0 |
| OS | Win 10, Win 11, Linux (Kernel 4.x) | Win 10, Win 11, Linux (Kernel 4.x) | Win 10, Win 11, Linux (Kernel 4.x) |
| Dimensions (mm) | 185 x 120 x 45 | 180 x 180 x 50 | 180 x 180 x 50 |



| Model |  VTC 6210-BK |  VTC 6210-VR4 |  VTC 6220-BK |  VTC 6221 |
|-----------------------|---|--|---|--|
| System | | | | |
| CPU | Intel Atom® E3845, 4 Core, 1.91GHz | Intel Atom® E3845, 4 Core, 1.91GHz | Intel Atom® x7-E3950, 4 Core, 2.0GHz | Intel Atom® x7-E3950, 4 Core, 2.0GHz |
| Chipset | N/A | N/A | N/A | N/A |
| Memory | 1 x DDR3L 1333 SO-DIMM, 4GB (default) up to 8GB | 1 x DDR3L 1333 SO-DIMM, 4GB (default) up to 8GB | 1 x DDR3L 1866 SO-DIMM, 4GB (default) up to 8GB | 1 x DDR3L 1600 SO-DIMM, 4GB (default) up to 8GB |
| Storage | 1 x 2.5" SATA 2.0 SSD/HDD (removable, 9.5mm) | 1 x 2.5" SATA 2.0 SSD/HDD (removable, 9.5mm) | 2 x 2.5" SATA 3.0 SSD/HDD (removable, 9.5mm) | 1 x 2.5" SATA 3.0 SSD (removable, 9.5mm) |
| Second Storage | 1 x CFast (external accessible) | 1 x CFast (external accessible) | N/A | 1 x CFast (external accessible), 1 x mSATA (occupied CFast, BOM optional) |
| Video Out | 1 x VGA, 1 x DP | VGA, DP, 4 x (Video-in + Audio-in) | 1 x VGA, 1 x HDMI, 1 x LVDS (optional), 1 x ultraONE+ (optional) | 2 x VGA, 1 x HDMI |
| Audio | 2 x Mic-in, 2 x Line-out | 2 x Mic-in, 2 x Line-out | 2 x Mic-in, 2 x Line-out | 1 x Mic-in, 2 x Line-out |
| Ethernet | 2 x Intel® 10/100/1000 | 2 x Intel® 10/100/1000 | 3 x Intel® 10/100/1000 (2 x LAN exclusion with PoE) | 2 x Intel® 10/100/1000, (BOM option up to 3) |
| PoE | N/A | N/A | 2 x Independent Intel® 10/100/1000 (w/ 802.3at/af). Total 30W (BOM optional) | N/A |
| USB | 1 x USB 3.2 (Gen1), 2 x USB 2.0 | 1 x USB 3.2 (Gen1), 2 x USB 2.0 | 2 x USB 3.2 (Gen1), 1 x USB 2.0 | 1 x USB 3.2 (Gen1), 3 x USB 2.0 |
| COM | 2 x RS232 (Full), 1 x RS422/485 | 1 x RS232 (full), 1 x RS422/485 | 2 x RS232 (full), 1 x RS422/485 | 1 x RS232 (full), 1 x RS232 (Tx, Rx), 1 x RS485 |
| DIO | 8 x Programmable PC GPIO, 2 x MCU-DI, 2 x MCU-DO | 8 x Programmable PC GPIO, 2 x MCU-DI, 2 x MCU-DO | 4 x DI, 4 x DO | 4 x DI, 4 x DO |
| CAN Bus | 1 x CAN Bus 2.0B | 1 x CAN Bus 2.0B | 1 x CAN Bus 2.0B (w/ isolation) | 1 x CAN Bus 2.0B (w/ isolation) |
| DC Output | 12V (2A) | 12V (2A) | 12V (2A) | 12V (2A) |
| SIM Socket | 3 | 3 | 4 | 6 (BOM option up to 8, eSIM BOM optional) |
| WWAN | 2 | 2 | 2 | 3 (BOM option up to 3) |
| mini-PCIe Socket | - 2 x (USB 2.0, PCIe 2.0) - 2 x (USB 2.0) for LTE | - 2 x (USB 2.0, PCIe 2.0) - 2 x (USB 2.0) for LTE | - 2 x (USB 2.0, PCIe 2.0) - 1 x (USB 2.0) for LTE - BOM option to 1 x M.2 3042 Key B (USB 2.0, USB 3.2 (Gen1)) for LTE/5G | - 2 x (USB 2.0, PCIe 2.0) - 1 x (USB 2.0) for LTE |
| M.2 Socket | N/A | N/A | - 1 x M.2 3042 Key B (USB 2.0, USB 3.2 (Gen1)) for LTE/5G | - 1 x M.2 3042/3052 Key B (USB 2.0, USB 3.0) for LTE/5G - 1 x M.2 3042 Key B (USB 2.0, USB 3.2 (Gen1)) for LTE/5G |
| GNSS | VIOB-GPS-02 module (u-blox NEO-M8N) | VIOB-GPS-02 module (u-blox NEO-M8N) | VIOB-GPS-02 module (u-blox NEO-M8N) | VIOB-GPS-02 module (u-blox NEO-M8N) |
| Power Input | DC 9V to 36V | DC 9V to 36V | DC 9V to 36V | DC 9V to 48V |
| Back Up Battery | N/A | N/A | Optional | N/A |
| Ingress Protection | N/A | N/A | N/A | N/A |
| Certification | CE, FCC Class B, E13 | CE, FCC Class B, UKCA, E13 | CE, FCC Class A, UKCA, E13 | CE, FCC Class A, UKCA, E13 |
| Operating Temperature | -30°C to 70°C | -30°C to 70°C | -40°C to 70°C (w/o internal backup battery) | -40°C to 70°C |
| TPM | N/A | N/A | TPM 2.0 | TPM 2.0, optional |
| OS | Win 10, Win 8, Win 7, WES 7, Linux (Kernel 4.x) | Win 10, Win 8, Win 7, WES 7, Linux (Kernel 4.x) | Win 10, Linux (Kernel 4.x) | Win 10, Linux (Kernel 4.x) |
| Dimensions (mm) | 260 x 176 x 50 | 260 x 176 x 50 | 260 x 196 x 50 | 260 x 196 x 50 |



Vehicle Telematics Computer







| Model | Coming soon | | Coming soon | |
|-----------------------|---|---|---|---|
| | VTC 6231 | VTC 6231-IP | VTC 6222-C4S | VTC 7250-7C8 |
| System | Intel Atom® x7433RE, 4 Core, 2.7GHz | Intel Atom® x7433RE, 4 Core, 2.7GHz | Intel Atom® x7-E3950, 4 Core, 2.0GHz | Intel® Core™ i7-8700T, 6 Core, 4.0GHz |
| Chipset | N/A | N/A | N/A | Intel® Q370 |
| Memory | 1 x DDR5 4800 SO-DIMM, 8GB (default) up to 16GB, in-band ECC support | 1 x DDR5 4800 SO-DIMM, 8GB (default) up to 16GB, in-band ECC support | 1 x DDR3L 1866 SO-DIMM, 4GB (default) up to 8GB | 2 x DDR4 2666 SO-DIMM, 4GB + 4GB (default) up to 32GB+32GB |
| Storage | 1 x 2.5" SATA 3.0 SSD (removable, 9.5mm) | 1 x 2.5" SATA 3.0 SSD (removable, 9.5mm) | 2 x 2.5" SATA 3.0 SSD (removable, 15mm) | 2 x 2.5" SATA 3.0 SSD (removable, 15mm) |
| Second Storage | 1 x mSATA (occupied mini-PCIe socket) | 1 x mSATA (occupied mini-PCIe socket) | 1 x SD (external accessible), 1 x Internal USB DOM | 2 x mSATA 3.0 (BIOS selection) |
| I/O Interface | 1 x VGA, 1 x HDMI, 1 x DP | 1 x VGA, 1 x HDMI | 1 x VGA, 2 x HDMI | 1 x VGA, 1 x HDMI, 1 x ultraONE+ |
| Audio | 1 x Mic-in, 1 x Line-in, 1 x Line-out | 1 x Mic-in, 1 x Line-in, 1 x Line-out | 1 x Mic-in, 2 x Line-out | 1 x Mic-in, 1 x Line-out |
| Ethernet | 2 x Intel® 10/100/1000/2500 | 2 x Intel® 10/100/1000/2500 | 1 x Intel® 10/100/1000 | 1 x Intel® 10/100/1000 |
| PoE | N/A | N/A | 4 x Intel® 10/100/1000 (w/ 802.3at/af). Total 60W | 8 x Independent Intel® 10/100/1000 (w/ 802.3at/af). Total 60W |
| USB | 2 x USB 2.0, 2 x USB 3.2 (Gen2) | 2 x USB 2.0, 2 x USB 3.2 (Gen2) | 1 x USB 3.2 (Gen1), 2 x USB 2.0 | 6 x USB 3.2 (Gen2) |
| COM | 2 x RS232 (Full)/422/485, 1 x RS232 (Full) | 2 x RS232 (Full)/422/485, 1 x RS232 (Full) | 1 x RS232 (Full), 1 x RS232 (Tx, Rx), 1 x RS422/485 | 2 x RS232 (Full), 1 x RS232 (Full)/422/485 |
| DIO | 4 x DI, 4 x DO | 4 x DI, 4 x DO | 4 x DI, 4 x DO (w/ isolation) | 4 x DI, 4 x DO |
| CAN Bus | 1 x CAN FD (w/ isolation) | 1 x CAN FD (w/ isolation) | 1 x CAN Bus 2.0B (w/ isolation) | 1 x CAN Bus 2.0B (w/ isolation) |
| DC Output | 12V (2A) | 12V (2A) | 12V (2A) | 12V (2A) |
| SIM Socket | 8 (eSIM BOM optional) | 8 (eSIM BOM optional) | 2 (eSIM BOM optional) | 3 (eSIM BOM optional) |
| WWAN | 4 | 4 | 1 | 2 |
| Expansion | <ul style="list-style-type: none"> 1 x (USB 2.0, SATA 3.0/PCIe 3.0) 1 x (USB 2.0, PCIe 3.0) for Wi-Fi BOM option to 1 x M.2 3052 Key B (USB 2.0, USB 3.2 Gen 2x1) for LTE/5G | <ul style="list-style-type: none"> 1 x (USB 2.0, SATA 3.0/PCIe 3.0) 1 x (USB 2.0, PCIe 3.0) for Wi-Fi BOM option to 1 x M.2 3052 Key B (USB 2.0, USB 3.2 Gen 2x1) for LTE/5G | <ul style="list-style-type: none"> 2 x (USB 2.0, PCIe 2.0) 1 x (USB 2.0) for LTE BOM option to 1 x M.2 3042 Key B (USB 2.0, USB 3.2 (Gen1)) for LTE/5G supported | <ul style="list-style-type: none"> 2 x (USB 2.0, PCIe 3.0/SATA 3.0) 1 x (USB 2.0) for LTE BOM option to 1 x M.2 3042 Key B (USB 2.0, USB 3.1) for LTE/5G |
| M.2 Socket | <ul style="list-style-type: none"> 2 x M.2 3042/3052 Key B (USB 2.0, USB 3.2) for LTE/5G 1 x M.2 2230 Key E (PCIe 3.0 x 1, USB 2.0) for Wi-Fi | <ul style="list-style-type: none"> 2 x M.2 3042/3052 Key B (USB 2.0, USB 3.2) for LTE/5G 1 x M.2 2230 Key E (PCIe 3.0 x 1, USB 2.0) for Wi-Fi | N/A | <ul style="list-style-type: none"> 1 x M.2 3042 Key B (USB 2.0, USB 3.2 (Gen1)) for LTE/5G |
| GNSS | VIOB-GPS-06 module (u-blox NEO-M9N) | VIOB-GPS-06 module (u-blox NEO-M9N) | u-blox NEO-M8N onboard | VIOB-GPS-02 module (u-blox NEO-M8N) |
| Power | DC 9V to 36V | DC 9V to 36V | DC 9V to 48V | DC 9V to 36V |
| Back Up Battery | N/A | N/A | N/A | N/A |
| Environment | Ingress Protection: N/A | Ingress Protection: IP67 | Ingress Protection: N/A | Ingress Protection: N/A |
| Certification | CE, FCC Class A, UKCA, E13 | CE, FCC Class A, UKCA, E13 | CE, FCC Class A, UKCA, E13 | CE, FCC Class A, UKCA, E13 |
| Operating Temperature | -40°C to 70°C | -40°C to 70°C | -40°C to 70°C | -30°C to 60°C |
| Others | TPM 2.0 | TPM 2.0 | TPM 2.0, optional | TPM 2.0 |
| OS | Win 10, Win 11, Linux (Kernel 4.x) | Win 10, Win 11, Linux (Kernel 4.x) | Win 10, Linux (Kernel 4.x) | Win 10/11, Linux (Kernel 4.x) |
| Dimensions (mm) | 260 x 196 x 50 | 260 x 196 x 70 | 260 x 196 x 66.5 | 260 x 256 x 90.1 |









| Model | VTC 7251 | VTC 7251-7C4 | VTC 7252-7C4IP |
|-----------------------|---|---|--|
| | System | Intel® Core™ i7-8700T, 6 Core, 4.0GHz | Intel® Core™ i7-8700T, 6 Core, 4.0GHz |
| Chipset | Intel® Q370 | Intel® Q370 | Intel® C246 |
| Memory | 2 x DDR4 2666 SO-DIMM, 4GB + 4GB (default) up to 32GB+32GB | 2 x DDR4 2666 SO-DIMM, 4GB + 4GB (default) up to 32GB+32GB | 2 x DDR4 2666 SO-DIMM, 4GB + 4GB (default) up to 32GB+32GB |
| Storage | 2 x 2.5" SATA 3.0 SSD (removable, 15mm) | 2 x 2.5" SATA 3.0 SSD (removable, 15mm) | 2 x 2.5" SATA 3.0 SSD (9.5 mm) |
| Second Storage | 2 x mSATA 3.0 (BIOS selection) | 2 x mSATA 3.0 (BIOS selection) | 2 x mSATA 3.0 (BIOS selection), 1 x CFAST (external accessible) |
| I/O Interface | 1 x VGA, 1 x HDMI | 1 x VGA, 1 x HDMI | 1 x VGA, 1 x HDMI (optional) |
| Audio | 1 x Mic-in, 2 x Line-out | 1 x Mic-in, 2 x Line-out | 1 x Mic-in, 2 x Line-out |
| Ethernet | 2 x Intel® 10/100/1000 | 1 x Intel® 10/100/1000 | 2 x Intel® 10/100/1000 |
| PoE | N/A | 4 x Independent Intel® 10/100/1000 (w/ 802.3at/af). Total 60W | 4 x Independent Intel® 10/100/1000 (w/ 802.3at/af). Total 60W |
| USB | 6 x USB 3.2 (Gen2) | 6 x USB 3.2 (Gen2) | 2 x USB 3.2 (Gen2), 2 x USB 2.0 |
| COM | 2 x RS232 (Full), 1 x RS232 (Full)/422/485 | 2 x RS232 (Full), 1 x RS232 (Full)/422/485 | 2 x RS232 (Full), 1 x RS232 (Full)/422/485 |
| DIO | 4 x DI, 4 x DO | 4 x DI, 4 x DO | 3 x DI, 3 x DO |
| CAN Bus | 1 x CAN Bus 2.0B (w/ isolation) | 1 x CAN Bus 2.0B (w/ isolation) | 2 x CAN Bus 2.0B (w/ isolation) |
| DC Output | 12V (2A) | 12V (2A) | 12V (2A) (internal reserved) |
| SIM Socket | 6 (BOM option up to 8, eSIM BOM optional) | 6 (BOM option up to 8, eSIM BOM optional) | 2 (eSIM BOM optional) |
| WWAN | 3 (BOM option up to 4) | 3 (BOM option up to 4) | 1 |
| Expansion | <ul style="list-style-type: none"> 2 x (USB 2.0, PCIe 3.0/SATA 3.0) 2 x (USB 2.0) for LTE BOM option to 2 x M.2 3042 Key B (USB 2.0, USB 3.1) for LTE/5G | <ul style="list-style-type: none"> 2 x (USB 2.0, PCIe 3.0/SATA 3.0) 2 x (USB 2.0) for LTE BOM option to 2 x M.2 3042 Key B (USB 2.0, USB 3.1) for LTE/5G | <ul style="list-style-type: none"> 2 x (USB 2.0, PCIe 3.0/SATA 3.0) |
| M.2 Socket | <ul style="list-style-type: none"> 1 x M.2 3042/3052 Key B (USB 2.0, USB 3.2 (Gen1)) for LTE/5G | <ul style="list-style-type: none"> 1 x M.2 3042/3052 Key B (USB 2.0, USB 3.2 (Gen1)) for LTE/5G | <ul style="list-style-type: none"> 1 x M.2 3042/3052 Key B (USB 2.0, USB 3.2 (Gen1)) for LTE/5G 1 x M.2 2230 Key E (USB 2.0, 2 x PCIe 3.0). BOM option to 1 x mini-PCIe (USB 2.0, PCIe 3.0). |
| GNSS | VIOB-GPS-02 module (u-blox NEO-M8N) | VIOB-GPS-02 module (u-blox NEO-M8N) | VIOB-GPS-02 module (u-blox NEO-M8N) |
| Power | DC 9V to 36V | DC 9V to 36V | DC 9V to 36V |
| Back Up Battery | N/A | N/A | N/A |
| Environment | Ingress Protection: N/A | Ingress Protection: N/A | Ingress Protection: IP65 |
| Certification | CE, FCC Class A, UKCA, E13 | CE, FCC Class A, UKCA, E13 | CE, FCC Class A, UKCA, E13 |
| Operating Temperature | -30°C to 70°C | -30°C to 60°C | -30°C to 60°C |
| Others | TPM 2.0 | TPM 2.0 | TPM 2.0 |
| OS | Win 10/11, Linux (Kernel 4.x) | Win 10/11, Linux (Kernel 4.x) | Win 10/11, Linux (Kernel 4.x) |
| Dimensions (mm) | 260 x 256 x 83.5 | 260 x 256 x 83.5 | 260 x 256 x 66.5 |



Vehicle Telematics Computer






| Model |   |   |   |
|-----------------------|---|---|---|
| | VTC 7260-5 | VTC 7260-5C4 | VTC 7260-7 |
| System | | | |
| CPU | Intel® Core™ i5-1145GRE, 4 Core, 2.6GHz | Intel® Core™ i5-1145GRE, 4 Core, 2.6GHz | Intel® Core™ i7-1185GRE, 4 Core, 2.8GHz |
| Chipset | N/A | N/A | N/A |
| Memory | 2 x DDR4 3200 SO-DIMM, 4GB+4GB (default) up to 32GB+32GB, in-band ECC support | 2 x DDR4 3200 SO-DIMM, 4GB+4GB (default) up to 32GB+32GB, in-band ECC support | 2 x DDR4 3200 SO-DIMM, 4GB+4GB (default) up to 32GB+32GB, in-band ECC support |
| Storage | 1 x 2.5" SATA 3.0 SSD (15mm) | 1 x 2.5" SATA 3.0 SSD (15mm) | 1 x 2.5" SATA 3.0 SSD (15mm) |
| Second Storage | 1 x mSATA 3.0, 1 x M.2 2280 Key M NVMe (PCIe4.0 x4) | 1 x mSATA 3.0, 1 x M.2 2280 Key M NVMe (PCIe4.0 x4) | 1 x mSATA 3.0, 1 x M.2 2280 Key M NVMe (PCIe4.0 x4) |
| Video Out | 1 x VGA, 1 x HDMI, 1 x DP | 1 x VGA, 1 x HDMI, 1 x DP | 1 x VGA, 1 x HDMI, 1 x DP |
| Audio | 1 x Mic-in, 1 x Line-out | 1 x Mic-in, 1 x Line-out | 1 x Mic-in, 1 x Line-out |
| Ethernet | 1 x Intel® 10/100/1000 (WoL, PXE, lamt support), 2 x Independent Intel® 2.5GbE | 1 x Intel® 10/100/1000 (WoL, PXE, lamt support) | 1 x Intel® 10/100/1000 (WoL, PXE, lamt support), 2 x Independent Intel® 2.5GbE |
| I/O Interface | | | |
| PoE | N/A | 4 x Independent Intel® 2.5GbE (IEEE 802.3at/af, total 60W) | N/A |
| USB | 3 x USB 3.2 (Gen1), 1 x USB 2.0 | 3 x USB 3.2 (Gen1), 1 x USB 2.0 | 3 x USB 3.2 (Gen1), 1 x USB 2.0 |
| COM | 1 x RS232 (full), 2 x RS232 (full)/422/485 | 2 x RS232 (full)/422/485 | 1 x RS232 (full), 2 x RS232 (full)/422/485 |
| DIO | 4 x DI, 4 x DO | 4 x DI, 4 x DO | 4 x DI, 4 x DO |
| CAN Bus | 1 x CAN Bus 2.0B (w/ isolation) | 1 x CAN Bus 2.0B (w/ isolation) | 1 x CAN Bus 2.0B (w/ isolation) |
| DC Output | N/A | N/A | N/A |
| SIM Socket | 4 | 4 | 4 |
| WWAN | 1~2 | 1~2 | 1~2 |
| Expansion | | | |
| mini-PCIe Socket | - 1 x (USB 2.0/3.2, PCIe 3.0) | - 1 x (USB 2.0/3.2, PCIe 3.0) | - 1 x (USB 2.0/3.2, PCIe 3.0) |
| M.2 Socket | - 1 x M.2 3042/3052 Key B (USB 3.2 (Gen2)) for LTE/5G - 1 x M.2 3030 Key E (PCIe 3.0 x2, USB 2.0) for Wi-Fi/ Hailo AI card | - 1 x M.2 3042/3052 Key B (USB 3.2 (Gen2)) for LTE/5G - 1 x M.2 3030 Key E (PCIe 3.0 x2, USB 2.0) for Wi-Fi/ Hailo AI card | - 1 x M.2 3042/3052 Key B (USB 3.2 (Gen2)) for LTE/5G - 1 x M.2 3030 Key E (PCIe 3.0 x2, USB 2.0) for Wi-Fi/ Hailo AI card |
| GNSS | VIOB-GPS-06 module (u-blox NEO-M9N) | VIOB-GPS-06 module (u-blox NEO-M9N) | VIOB-GPS-06 module (u-blox NEO-M9N) |
| Power | | | |
| Power Input | DC 9V to 36V | DC 9V to 36V | DC 9V to 36V |
| Back Up Battery | N/A | N/A | N/A |
| Ingress Protection | N/A | N/A | N/A |
| Environment | | | |
| Certification | CE, FCC Class A, UKCA, E13 | CE, FCC Class A, UKCA, E13 | CE, FCC Class A, UKCA, E13 |
| Operating Temperature | -30°C~65/70°C (15W/12W TDP) | -30°C to 65/70°C (15W/12W TDP) | -30°C to 65/70°C (15W/12W TDP) |
| Others | | | |
| TPM | TPM 2.0 | TPM 2.0 | TPM 2.0 |
| OS | Win 10/11, Linux (Kernel 5.x) | Win 10/11, Linux (Kernel 5.x) | Win 10/11, Linux (Kernel 5.x) |
| Dimensions (mm) | 210 x 173 x 75 | 210 x 173 x 75 | 210 x 173 x 75 |



| Model |   |   |   |
|-----------------------|---|---|---|
| | VTC 7260-7C4 | VTC 7270 | VTC 7270-C4/C8 |
| System | | | |
| CPU | Intel® Core™ i7-1185GRE, 4 Core, 2.8GHz | 12th/13th Gen Intel® Core™ i | 12th/13th Gen Intel® Core™ i |
| Chipset | N/A | Intel® R680E | Intel® R680E |
| Memory | 2 x DDR4 3200 SO-DIMM, 4GB+4GB (default) up to 32GB+32GB, in-band ECC support | 2 x DDR5 4800 SO-DIMM, up to 32GB+32GB, ECC support | 2 x DDR5 4800 SO-DIMM, up to 32GB+32GB, ECC support |
| Storage | 1 x 2.5" SATA 3.0 SSD (15mm) | 2 x 2.5" SATA 3.0 SSD (removable, 15mm) | 2 x 2.5" SATA 3.0 SSD (removable, 15mm) |
| Second Storage | 1 x mSATA 3.0, 1 x M.2 2280 Key M NVMe (PCIe4.0 x4) | 1 x M.2 2280 Key M NVMe (PCIe4.0 x4) | 1 x M.2 2280 Key M NVMe (PCIe4.0 x4) |
| Video Out | 1 x VGA, 1 x HDMI, 1 x DP | 1 x VGA, 1 x HDMI, 1 x DP | 1 x VGA, 1 x HDMI, 1 x DP |
| Audio | 1 x Mic-in, 1 x Line-out | 1 x Mic-in, 1 x Line-in, 1 x Line-out | 1 x Mic-in, 1 x Line-in, 1 x Line-out |
| Ethernet | 1 x Intel® 10/100/1000 (WoL, PXE, lamt support) | 1 x Intel® 10/100/1000 (WoL, PXE, iAMT support), 2 x Independent Intel® 2.5GbE | 1 x Intel® 10/100/1000 (WoL, PXE, lamt support) |
| I/O Interface | | | |
| PoE | 4 x Independent Intel® 2.5GbE (IEEE 802.3at/af, total 60W) | N/A | 4/8 x Independent Intel® 2.5GbE (IEEE 802.3at/af, total 60W/120W) |
| USB | 3 x USB 3.2 (Gen1), 1 x USB 2.0 | 6 x USB 3.2 (Gen2) | 6 x USB 3.2 (Gen2) |
| COM | 2 x RS232 (full)/422/485 | 2 x RS232 (full), 2 x RS232 (full)/422/485 | 2 x RS232 (full), 2 x RS232 (full)/422/485 |
| DIO | 4 x DI, 4 x DO | 4 x DI, 4 x DO | 4 x DI, 4 x DO |
| CAN Bus | 1 x CAN Bus 2.0B (w/ isolation) | 2 x CAN FD (w/ isolation) | 2 x CAN FD (w/ isolation) |
| DC Output | N/A | 12V (2A) | 12V (2A) |
| SIM Socket | 4 | 4 | 4 |
| WWAN | 1~2 | 1~2 | 1~2 |
| Expansion | | | |
| mini-PCIe Socket | - 1 x (USB 2.0/3.2, PCIe 3.0) | - 1 x (PCIe 3.0, SATA 3.0, USB3.2), default PCIe 3.0 for Wi-Fi - 1 x (USB 3.2, PCIe 3.0, SATA 3.0), default USB 3.2 for LTE - Change interfaces by DIP switch setting | - 1 x (PCIe 3.0, SATA 3.0, USB3.2), default PCIe 3.0 for Wi-Fi - 1 x (USB 3.2, PCIe 3.0, SATA 3.0), default USB 3.2 for LTE - Change interfaces by DIP switch setting |
| M.2 Socket | - 1 x M.2 3042/3052 Key B (USB 3.2 (Gen2)) for LTE/5G - 1 x M.2 3030 Key E (PCIe 3.0 x2, USB 2.0) for Wi-Fi/ Hailo AI card | - 1 x M.2 3042/3052 Key B (USB 2.0, USB 3.2 (Gen2)) for LTE/5G - 1 x M.2 2230 Key E (PCIe 3.0 x2, USB 2.0) for Wi-Fi/Hailo AI card | - 1 x M.2 3042/3052 Key B (USB 2.0, USB 3.2 (Gen2)) for LTE/5G - 1 x M.2 2230 Key E (PCIe 3.0 x2, USB 2.0) for Wi-Fi/Hailo AI card |
| GNSS | VIOB-GPS-06 module (u-blox NEO-M9N) | VIOB-GPS-06 module (u-blox NEO-M9N) | VIOB-GPS-06 module (u-blox NEO-M9N) |
| Power | | | |
| Power Input | DC 9V to 36V | DC 9V to 36V | DC 9V to 36V |
| Back Up Battery | N/A | N/A | N/A |
| Ingress Protection | N/A | N/A | N/A |
| Environment | | | |
| Certification | CE, FCC Class A, UKCA, E13 | CE, FCC Class A, UKCA, E13 | CE, FCC Class A, UKCA, E13 |
| Operating Temperature | -30°C to 60°C (15W TDP & PoE) | -35°C~70°C (35W CPU, fanless; 65W CPU, w/ fan) | -35°C~60°C/65°C (35W CPU, fanless, 120W/60W PoE; 65W CPU, w/ fan, 120W/60W PoE) |
| Others | | | |
| TPM | TPM 2.0 | TPM 2.0 | TPM 2.0 |
| OS | Win 10/11, Linux (Kernel 5.x) | Win 10/11, Linux (Kernel 5.x) | Win 10/11, Linux (Kernel 5.x) |
| Dimensions (mm) | 210 x 173 x 75 | 260 x 210 x 81 | 260 x 210 x 81 |



Modular Vehicle Computer System

| Model |  |  |  |  |  |
|-----------------------|--|---|---|--|--|
| | MVS 2620-IP | MVS 5600-3BU | MVS 5600-7BU | MVS 5600-3IPK | MVS 5600-7IPK |
| System | | | | | |
| CPU | Intel Atom® x7-E3950, 4 Core, 2.0GHz | Intel® Core™ i3-6100U, 2 Core, 2.3GHz | Intel® Core™ i7-6600U, 2 Core, 2.6GHz | Intel® Core™ i3-6100U, 2 Core, 2.3GHz | Intel® Core™ i7-6600U, 2 Core, 2.6GHz |
| Chipset | N/A | N/A | N/A | N/A | N/A |
| Memory | 1 x DDR3L 1600/1866 SO-DIMM, 4GB (default) up to 8GB | 2 x DDR3L 1600/1866 SO-DIMM, 2GB (default) up to 16GB | 2 x DDR3L 1600/1866 SO-DIMM, 2GB (default) up to 16GB | 2 x DDR3L 1600/1866 SO-DIMM, 2GB (default) up to 16GB | 2 x DDR3L 1600 SO-DIMM, 2GB (default) up to 16GB |
| Storage | 1 x 2.5" SATA 3.0 SSD/HDD | 1 x 2.5" SATA 3.0 SSD/HDD (removable, 9.5mm) | 1 x 2.5" SATA 3.0 SSD/HDD (removable, 9.5mm) | 1 x 2.5" SATA 3.0 SSD/HDD | 1 x 2.5" SATA 3.0 SSD/HDD |
| Second Storage | 1 x CFast (external accessible) | 1 x CFast (external accessible) | 1 x CFast (external accessible) | 1 x CFast (external accessible) | 1 x CFast (external accessible) |
| Video Out | 1 x VGA | 1 x VGA, 1 x HDMI | 1 x VGA, 1 x HDMI | 1 x VGA | 1 x VGA |
| Audio | 1 x Mic-in, 2 x Line-out | 2 x Mic-in, 2 x Line-out | 2 x Mic-in, 2 x Line-out | 1 x Mic-in, 2 x Line-out | 1 x Mic-in, 2 x Line-out |
| Ethernet | 2 x Intel® 10/100/1000 | 2 x Intel® 10/100/1000 | 2 x Intel® 10/100/1000 | 2 x Intel® 10/100/1000 | 2 x Intel® 10/100/1000 |
| PoE | N/A | N/A | N/A | N/A | N/A |
| I/O Interface | | | | | |
| USB | 3 x USB 2.0 | 4 x USB 3.2 (Gen1) | 4 x USB 3.2 (Gen1) | 1 x USB 3.2 (Gen1), 2 x USB 2.0 | 1 x USB 3.2 (Gen1), 2 x USB 2.0 |
| COM | 2 x RS232 (Full), 1 x RS232 (Tx/Rx), 2 x RS485 | 2 x RS232 (Full), 1 x RS232 (Full)/422/485 | 2 x RS232 (Full), 1 x RS232 (Full)/422/485 | 2 x RS232 (Full), 1 x RS232 (Tx/Rx), 2 x RS485 | 2 x RS232 (Full), 1 x RS232 (Tx/Rx), 2 x RS485 |
| DIO | 3 x DI (w/ isolation) 3 x DO (w/ isolation) | 8 x Programmable DIO MCU: 2 x DI, 2 x DO, 1 x Speed frequency | 8 x Programmable DIO MCU: 2 x DI, 2 x DO, 1 x Speed frequency | 3 x DI (w/ isolation) 3 x DO (w/ isolation) | 3 x DI (w/ isolation) 3 x DO (w/ isolation) |
| CAN Bus | 1 x CANBus 2.0B (w/ isolation) | 1 x CAN Bus 2.0B | 1 x CAN Bus 2.0B | 1 x CAN Bus 2.0B (w/ isolation) | 1 x CAN Bus 2.0B (w/ isolation) |
| DC Output | 12V (2A) | 12V (2A) | 12V (2A) | 12V (2A) | 12V (2A) |
| SIM Socket | 3 | 3 | 3 | 3 | 3 |
| WWAN | 2 | 2 | 2 | 2 | 2 |
| Expansion | | | | | |
| mini-PCIe Socket | - 1 x (USB 2.0, PCIe 2.0) for LTE - 1 x (USB 2.0) for LTE - 1 x (USB 2.0, PCIe 2.0) - 1 x (USB 2.0) | - 1 x (USB 2.0, PCIe 2.0) for LTE - 1 x (USB 2.0) for LTE - 1 x (USB 2.0, PCIe 2.0) | - 1 x (USB 2.0, PCIe 2.0) for LTE - 1 x (USB 2.0) for LTE - 1 x (USB 2.0, PCIe 2.0) | - 1 x (USB 2.0, PCIe 2.0) for LTE - 1 x (USB 2.0) for LTE - 1 x (USB 2.0, PCIe 2.0) - 1 x (USB 2.0) | - 1 x (USB 2.0, PCIe 2.0) for LTE - 1 x (USB 2.0) for LTE - 1 x (USB 2.0, PCIe 2.0) - 1 x (USB 2.0) |
| M.2 Socket | N/A | N/A | N/A | N/A | N/A |
| GNSS | VIOB-GPS-02 module (u-blox NEO-M8N) | VIOB-GPS-02 module (u-blox NEO-M8N) | VIOB-GPS-02 module (u-blox NEO-M8N) | VIOB-GPS-02 module (u-blox NEO-M8N) | VIOB-GPS-02 module (u-blox NEO-M8N) |
| Power | | | | | |
| Power Input | DC 9V to 36V | DC 9V to 36V | DC 9V to 36V | DC 9V to 36V | DC 9V to 36V |
| Back Up Battery | N/A | Internal (optional) | Internal (optional) | N/A | N/A |
| Environment | | | | | |
| Ingress Protection | IP65 | N/A | N/A | IP65 | IP65 |
| Certification | CE, FCC Class A, UKCA, E13 | CE, FCC Class A, UKCA, E13 | CE, FCC Class A, UKCA, E13 | CE, FCC Class A, UKCA, E13 | CE, FCC Class A, UKCA, E13 |
| Operating Temperature | Win 10, Linux (Kernel 4.x) | -30°C to 60°C (w/o internal back up battery) | -30°C to 60°C (w/o internal back up battery) | -30°C to 60°C | -30°C to 60°C |
| TPM | N/A | TPM 2.0, optional | TPM 2.0, optional | TPM 2.0, optional | TPM 2.0, optional |
| Others | | | | | |
| OS | 260 x 198 x 50 | Win 10, Win 8, WES 8, Win 7, WES 7, Linux (Kernel 4.x) | Win 10, Win 8, WES 8, Win 7, WES 7, Linux (Kernel 4.x) | Win 10, Win 8, WES 8, Win 7, WES 7, Linux (Kernel 4.x) | Win 10, Win 8, WES 8, Win 7, WES 7, Linux (Kernel 4.x) |
| Dimensions (mm) | -40°C to 70°C | 260 x 196 x 66.5 | 260 x 196 x 66.5 | 260 x 198 x 66.5 | 260 x 198 x 66.5 |



Railway Computer - Box PC/Panel PC

nROK/vROK Series Brief Product Introduction

Product Description

nROK series, railway computer, in an extended operating temperature range of -40 to 70°C certified EN50155 and IP65 protection depended on models. The SKU with PoE integrated all-in-one computer can also work as a PoE switch and power supply for PoE cameras. Wide-range power input SKU from 24 to 110VDC includes isolation and protection against power dips. Multiple Wi-Fi 6/6E

and 5G/LTE cellular networks handle the connectivity that provides uninterrupted internet access and more transmission bandwidth, vROK series, all in one railway open frame panel computer, is designed for human machine interface (HMI) and passenger information system aimed at railway onboard infotainment applications.



5G/LTE, Wi-Fi 6/6E, BT, CAN/OBD, GNSS + DR, POE, and multi-SIM integration



Front accessible SSD storage



Optional isolated 24~110VDC power input



Global navigation satellite system for precise and real-time location

Application

nROK: Communications hub, passenger information system, onboard video surveillance, digital radio data/voice transmission system, freight management system, rail analytics system, rail maintenance applications.

vROK: Human machine interface (HMI), passenger information system, infotainment.

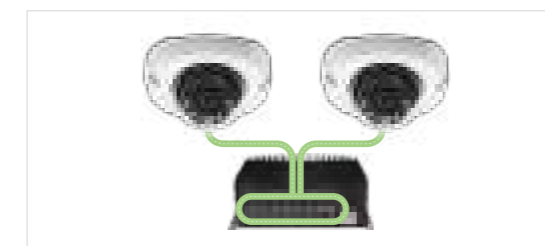
Product Highlight



EN50155 certified system



Protection for voltage dips






M12 X-coded/D-coded PoE port for IP cameras






Open frame design railway panel computer

Railway Computer - Box PC





| Model |  |  |  NEW |
|-----------------------|---|---|--|
| | VTC 1911-IPK | nROK 1020-A | nROK 1030-A |
| CPU | Intel Atom® E3815, 1 Core, 1.46GHz | Intel Atom® x5-E3930, 2 Core, 1.3GHz | Intel Atom® x6211E, 2 Core, 1.3GHz |
| Chipset | N/A | N/A | N/A |
| Memory | 1 x DDR3L 1600 SO-DIMM, 2GB (default) up to 8GB | 1 x DDR3L 1866 SO-DIMM, 4GB (default) up to 32GB | 1 x DDR4 2666 SO-DIMM, 4GB (default) up to 3200MHz 32GB, in-band ECC support |
| Storage | 1 x mSATA | 1 x 2.5" SATA 3.0 SSD (9.5mm) | 1 x 2.5" SATA 3.0 SSD (9.5mm) |
| Second Storage | 1 x 2.5" SATA 3.0 SSD (9.5mm) or 1 x SATA DOM | 1 x mSATA (occupied mPCIe socket) | 1 x mSATA (occupied mPCIe socket) |
| Video Out | 1 x VGA, 1 x HDMI (optional) | 1 x VGA, 1 x HDMI | 1 x VGA, 1 x HDMI |
| Audio | 1 x Mic-in, 1 x Line-out (DB15) | 1 x Mic-in, 1 x Line-out (M12) | 1 x Mic-in, 1 x Line-out (DB9) |
| Ethernet | 2 x Intel® 10/100/1000 (M12) | 1 x Intel® 10/100/1000 (M12) | 2 x Intel® 10/100/1000/2500 (M12) |
| PoE | N/A | N/A | N/A |
| USB | 1 x USB 2.0 | 2 x USB 3.2 (Gen1) | 1 x USB 3.2 (Gen2), 1 x USB 2.0 |
| COM | 2 x RS232 (Tx, Rx), 1 x RS485 | 5 x RS232 (Tx, Rx), 2 x RS485 | 2 x RS232 (Full)/422/485 |
| DIO | 3 x DI, 3 x DO | 5 x Programmable DIO | 5 x DI, 4 x DO |
| CAN Bus | 1 x CAN Bus 2.0B | 1 x CAN Bus 2.0B | 1 x CAN Bus 2.0B (w/ isolation) |
| DC Output | N/A | 12V (2A) | 12V (2A) |
| SIM Socket | 2 | 1 | 2 (eSIM BOM optional) |
| WWAN | 1 | 1 | 1 |
| mini-PCIe Socket | - 1 x (USB 2.0, PCIe 2.0/SATA 2.0) - 1 x (USB 2.0) for LTE | - 1 x (USB 2.0, PCIe 2.0/SATA 3.0) - 1 x (USB 2.0) for LTE | - 1 x (USB 2.0, PCIe 3.0/SATA 3.0) |
| M.2 Socket | N/A | N/A | - 1 x M.2 3042/3050/3052 Key B (USB 2.0, USB 3.2 (Gen 2))for LTE/5G - 1 x M.2 2230 Key E (USB 2.0, PCIe 3.0 x2) - BOM option to 1 x M.2 2230 Key E (USB 2.0, PCIe 3.0, PCIe 3.0) |
| GNSS | Onboard u-blox NEO-M8N | VIOB-GPS-02 module (u-blox NEO-M8N) | VIOB-GPS-06 module (u-blox NEO-M9N) |
| Power Input | DC 9V to 36V | DC 24V (w/o isolation) | DC 24V (w/o isolation) |
| Ingress Protection | IP67 | N/A | N/A |
| Certification | CE, FCC Class A, UKCA, E13, EN50155 | CE, FCC Class A, UKCA, EN50155 | CE, FCC Class A, UKCA, EN45545-2, EN50155 |
| Operating Temperature | -40°C to 70°C (OT4) | -40°C to 70°C (OT4) | -40°C to 70°C (OT4) |
| TPM | TPM 2.0 | TPM 2.0 | TPM 2.0 |
| OS | Win 10, Win 8, Win 7, WES 7, Linux (Kernel 4.x) | Win 10 64-bit, Linux (Kernel 4.x) | Win 10/11 64-bit, Linux (Kernel 5.x) |
| Dimensions (mm) | 185 x 167 x 56.5 | 185 x 120 x 45 | 185 x 120 x 50 |






| Model |  NEW |  NEW |  |
|-----------------------|--|--|---|
| | nROK 1031-A | nROK 1031-AC2 | VTC 6210-R |
| CPU | Intel Atom® x6413E, 4 Core, 1.5GHz | Intel Atom® x6413E, 4 Core, 1.5GHz | Intel Atom® E3845, 4 Core, 1.91GHz |
| Chipset | N/A | N/A | N/A |
| Memory | 1 x DDR4 2666 SO-DIMM, 4GB (default) up to 3200MHz 32GB, in-band ECC support | 1 x DDR4 2666 SO-DIMM, 4GB (default) up to 3200MHz 32GB, in-band ECC support | 1 x DDR3L 1600 SO-DIMM, 2GB (default) up to 8GB |
| Storage | 1 x 2.5" SATA 3.0 SSD (9.5mm) | 1 x 2.5" SATA 3.0 SSD (9.5mm) | 1 x 2.5" SATA 2.0 SSD (removable, 9.5mm) |
| Second Storage | 1 x M.2 2280 Key M NVMe SSD (SATA 3.0) | 1 x M.2 2280 Key M NVMe SSD (SATA 3.0) | 1 x CFast (external accessible) |
| Video Out | 1 x VGA, 1 x HDMI | 1 x VGA, 1 x HDMI | 1 x VGA, 1 x DP |
| Audio | 1 x Mic-in, 1 x Line-out (DB9) | 1 x Mic-in, 1 x Line-out (DB9) | 2 x Mic-in, 2 x Line-out (Phone Jack) |
| Ethernet | 1 x Intel® 10/100/1000/2500 1 x 10/100/1000 (M12) | 1 x Intel® 10/100/1000/2500 1 x 10/100/1000 (M12) | 2 x Intel® 10/100/1000 (M12) |
| PoE | N/A | 2 x M12 Independent Intel® 10/100/1000/2500 (802.3af/at). Total 60W | N/A |
| USB | 1 x M12 with 2 x USB 2.0 signal, 1 x USB 2.0, 1 x USB 3.2 (Gen 2) | 1 x M12 with 2 x USB 2.0 signal, 1 x USB 2.0, 1 x USB 3.2 (Gen 2) | 1 x M12 with 2 x USB 2.0 signal, 1 x USB 3.2 (Gen1) |
| COM | 1 x RS232 (Full)/422/485, 1 x RS232 (Tx, Rx), 2 x RS485 | 1 x RS232 (Full)/422/485, 1 x RS232 (Tx, Rx), 2 x RS485 | 2 x RS232 (Full), 1 x RS422/485. (w/ isolation) |
| DIO | 5 x DI, 4 x DO | 5 x DI, 4 x DO | 4 x DI, 4 x DO (w/ isolation) |
| CAN Bus | 1 x CAN Bus 2.0B (w/ isolation) | 1 x CAN Bus 2.0B (w/ isolation) | 1 x CAN Bus 2.0B (w/ isolation) |
| DC Output | 12V (2A) | 12V (2A) | N/A |
| SIM Socket | 2 (eSIM BOM optional) | 2 (eSIM BOM optional) | 3 |
| WWAN | 1 | 1 | 2 |
| mini-PCIe Socket | - 1 x (USB 2.0, PCIe 3.0) - BOM option to 1 x M.2 3042 Key B socket (USB 2.0, USB 3.2 (Gen 2)) for LTE/5G NR | - 1 x (USB 2.0, PCIe 3.0) - BOM option to 1 x M.2 3042 Key B socket (USB 2.0, USB 3.2 (Gen 2)) for LTE/5G NR | - 1 x (USB 2.0, PCIe 2.0) - 1 x (USB 2.0, PCIe 2.0) for LTE - 1 x (USB 2.0) for LTE |
| M.2 Socket | - 1 x M.2 3042/3050/3052 Key B (USB 2.0, USB 3.2 (Gen 2))for LTE/5G - 1 x M.2 2230 Key E (USB 2.0, PCIe 3.0 x2) - BOM option to 1 x M.2 2230 Key E (USB 2.0, PCIe 3.0, PCIe 3.0) | - 1 x M.2 3042/3050/3052 Key B (USB 2.0, USB 3.2 (Gen 2))for LTE/5G - 1 x M.2 2230 Key E (USB 2.0, PCIe 3.0 x2) - BOM option to 1 x M.2 2230 Key E (USB 2.0, PCIe 3.0, PCIe 3.0) | N/A |
| GNSS | VIOB-GPS-06 module (u-blox NEO-M9N) | VIOB-GPS-06 module (u-blox NEO-M9N) | VIOB-GPS-02 module (u-blox NEO-M8N) |
| Power Input | DC 24V (w/o isolation) | DC 24V (w/o isolation) | DC 24/36V (w/o isolation), 110V (w/ isolation) |
| Ingress Protection | N/A | N/A | N/A |
| Certification | CE, FCC Class A, UKCA, EN50155 | CE, FCC Class A, UKCA, EN50155 | CE, FCC Class A, UKCA, EN50155 |
| Operating Temperature | -40°C to 70°C (OT4) | -40°C to 70°C (OT4) | -40°C to 70°C (OT4) |
| TPM | TPM 2.0 | TPM 2.0 | N/A |
| OS | Win 10/11 64-bit, Linux (Kernel 5.x) | Win 10/11 64-bit, Linux (Kernel 5.x) | Win 10, Win 8, Win 7, WES 7, Linux (Kernel 4.x) |
| Dimensions (mm) | 180 x 180 x 60 | 180 x 180 x 60 | 260 x 176 x 70 |



Railway Computer - Box PC



| Model |  |  |  Coming soon |  |
|-----------------------|---|---|---|---|
| | nROK 6221 | nROK 6221-IP | nROK 6231-A | nROK 6222-AC4S |
| System | | | | |
| CPU | Intel Atom® x7-E3950, 4 Core, 2.0GHz | Intel Atom® x7-E3950, 4 Core, 2.0GHz | Intel Atom® x7433RE, 4 Core, 2.7GHz | Intel Atom® x7-E3950, 4 Core, 2.0GHz |
| Chipset | N/A | N/A | N/A | N/A |
| Memory | 1 x DDR3L 1600 SO-DIMM, 4GB (default) up to 8GB | 1 x DDR3L 1866 SO-DIMM, 4GB (default) up to 8GB | 1 x DDR5 4800 SO-DIMM, 8GB (default) up to 16GB, in-band ECC support | 1 x DDR3L 1866 SO-DIMM, 4GB (default) up to 8GB |
| Storage | 1 x 2.5" SATA 3.0 SSD (removable, 15mm) | 1 x 2.5" SATA 3.0 SSD (removable, 15mm) | 1 x 2.5" SATA 3.0 SSD (removable, 9.5mm) | 2 x 2.5" SATA 3.0 SSD (removable, 15mm) |
| Second Storage | 1 x CFast (external accessible, default) or 1 x mSATA (occupied CFast, BOM optional) | 1 x CFast (external accessible, default) or 1 x mSATA (occupied CFast, BOM optional) | 1 x mSATA (occupied mini-PCIe socket) | 1 x SD (external accessible), 1 x internal USB DOM |
| Video Out | 2 x VGA, 1 x HDMI | 2 x VGA | 1 x VGA, 1 x HDMI, 1 x DP | 1 x VGA, 2 x HDMI |
| Audio | 1 x Mic-in, 2 x Line-out (DB9) | 1 x Mic-in, 1 x Line-out (M8) | 1 x Mic-in, 1 x Line-in, 1 x Line-out | 1 x Mic-in, 1 x Line-out (M8) |
| Ethernet | 2 x Intel® 10/100/1000 (M12), (additional 1 x Intel® 10/100/1000 (M12), BOM optional) | 2 x Intel® 10/100/1000 (M12), (additional 1 x Intel® 10/100/1000 (M12), BOM optional) | 2 x Intel® 10/100/1000/2500 | 1 x Intel® 10/100/1000 (M12) |
| PoE | N/A | N/A | N/A | 4 x M12 Intel® 10/100/1000 (802.3af/at), Total 60W |
| USB | 1 x M12 with 2 x USB 2.0 signal, 1 x USB 2.0, 1 x USB 3.2 (Gen1) | 1 x M12 with 2 x USB 2.0 signal, 1 x USB 3.2 (Gen1) | 2 x USB 2.0, 2 x USB 3.2 (Gen2) | 1 x M12 with 2 x USB 2.0 signal, 1 x USB 3.2 (Gen1) |
| COM | 1 x RS232 (Full), 1 x RS232 (Tx, Rx), 1 x RS485. (w/ isolation) | 1 x RS232 (Full), 1 x RS232 (Tx, Rx), 1 x RS485. (w/ isolation) | 2 x RS232(full)/422/485, 1 x RS232 (Full) | 1 x RS232 (Full), 1 x RS232 (Tx, Rx), 1 x RS422/485. (w/ isolation) |
| DIO | 4 x DI, 4 x DO (w/ isolation) | 4 x DI, 4 x DO (w/ isolation) | 4 x DI, 4 x DO | 4 x DI, 4 x DO (w/ isolation) |
| CAN Bus | 1 x CAN Bus 2.0B (w/ isolation) | 1 x CAN Bus 2.0B (w/ isolation) | 1 x CAN FD (w/ isolation) | 1 x CAN Bus 2.0B (w/ isolation) |
| DC Output | N/A | N/A | N/A | N/A |
| SIM Socket | 6 (BOM option up to 8, eSIM BOM optional) | 6 (BOM option up to 8, eSIM BOM optional) | 8 (eSIM BOM optional) | 2 (eSIM BOM optional) |
| WWAN | 3 (BOM option up to 4) | 3 (BOM option up to 4) | 4 | 1 |
| mini-PCIe Socket | - 1 x (USB 2.0, PCIe 2.0) - 1 x (USB 2.0, PCIe 2.0). BOM option to 1 x mini-PCIe (USB 2.0) for LTE - 1 x (USB 2.0) for LTE | - 1 x (USB 2.0, PCIe 2.0) - 1 x (USB 2.0, PCIe 2.0). BOM option to 1 x mini-PCIe (USB 2.0) for LTE - 1 x (USB 2.0) for LTE | - 1 x (USB 2.0, SATA 3.0/PCIe 3.0) - 1 x (USB 2.0, PCIe 3.0) for Wi-Fi. BOM option to 1 x M.2 3052 Key B (USB 2.0, USB 3.2 Gen 2x1) for LTE/5G*4 | - 2 x (USB 2.0, PCIe 2.0) - 1 x (USB 2.0) for LTE - BOM option to 1 x M.2 3042 Key B (USB 2.0, USB 3.2 (Gen1)) for LTE/5G |
| M.2 Socket | - 1 x M.2 3042 Key B (USB 2.0, USB 3.2 (Gen 1))for LTE/5G - 1 x M.2 3042/3050/3052 Key B (USB 2.0, USB 3.2 (Gen 1)) for LTE/5G | - 1 x M.2 3042 Key B (USB 2.0, USB 3.2 (Gen 1))for LTE/5G - 1 x M.2 3042/3050/3052 Key B (USB 2.0, USB 3.2 (Gen 1)) for LTE/5G | - 2 x M.2 3042/3052 Key B (USB 2.0, USB 3.2) for LTE/5G - 1 x M.2 2230 Key E (PCIe 3.0 x 1, USB 2.0) for Wi-Fi | - 1 x M.2 3042 Key B (USB 2.0, USB 3.2 (Gen 1)) for LTE/5G (BOM optional) |
| GNSS | VIOB-GPS-02 module (u-blox NEO-M8N) | VIOB-GPS-02 module (u-blox NEO-M8N) | VIOB-GPS-06 module (u-blox NEO-M9N) | u-blox NEO-M8N onboard |
| Power Input | DC 24/36V (w/o isolation), DC 24/110V (w/ isolation, optional) | DC 24 (w/ isolation), DC 24/36V (w/o isolation, optional), DC 110V (w/ isolation, optional) | DC 24V (w/o isolation), DC 24/110V (w/ isolation, optional) | DC 24/36V (w/o isolation), DC 24/110V (w/ isolation, optional), external power kit, optional |
| Ingress Protection | N/A | IP65 | N/A | N/A |
| Certification | CE, FCC Class A, UKCA, EN50155 | CE, FCC Class A, UKCA, EN50155 | CE, FCC Class A, UKCA, EN50155 | CE, FCC Class A, UKCA, EN50155 |
| Operating Temperature | -40°C to 70°C (OT4) | -40°C to 70°C (OT4) | -40°C to 70°C (OT4) | -40°C to 70°C (OT4) |
| TPM | TPM 2.0, optional | TPM 2.0, optional | TPM 2.0 | TPM 2.0, optional |
| OS | Win 10 64-bit, Linux (Kernel 4.x) | Win 10 64-bit, Linux (Kernel 4.x) | Win 10, Win 11, Linux (Kernel 4.x) | Win 10 64-bit, Linux (Kernel 4.x) |
| Dimensions (mm) | 260 x 196 x 70 | 260 x 198 x 70 | 260 x 196 x 70 | 260 x 196 x 66.5 |







| Model |  |  |  |
|-----------------------|---|---|---|
| | nROK 7251-7A | nROK 7251-7C4 | nROK 7251-WI-7C4IP |
| System | | | |
| CPU | Intel® Core™ i7-9700TE, 8 Core, 3.8GHz | Intel® Core™ i7-9700TE, 8 Core, 3.8GHz | Intel® Core™ i7-9700TE, 8 Core, 3.8GHz |
| Chipset | Intel® Q370 | Intel® Q370 | Intel® Q370 |
| Memory | 2 x DDR4 2666 SO-DIMM, 8GB (default) up to 64GB | 2 x DDR4 2666 SO-DIMM, 8GB (default) up to 64 GB | 2 x DDR4 2666 SO-DIMM, 8GB (default) up to 64GB |
| Storage | 2 x 2.5" SATA 3.0 SSD (removable, 15mm) | 2 x 2.5" SATA 3.0 SSD (removable, 15mm) | 2 x 2.5" SATA 3.0 SSD (removable, 15mm) |
| Second Storage | 2 x mSATA (occupied mini-PCIe socket) | 2 x mSATA (occupied mini-PCIe socket) | 2 x mSATA (occupied mini-PCIe socket) |
| Video Out | 1 x VGA, 1 x HDMI | 1 x VGA, 1 x HDMI | 1 x VGA |
| Audio | 1 x Mic-in, 1 x Line-out (M8) | 1 x Mic-in, 1 x Line-out (M8) | 1 x Mic-in, 1 x Line-out (M8) |
| Ethernet | 2 x Intel® 10/100/1000 (M12) | 1 x Intel® 10/100/1000 (M12) | 1 x Intel® 10/100/1000 (M12) |
| PoE | N/A | 4 x M12 independent Intel® 10/100/1000 (802.3af/at), Total 60W | 4 x M12 independent Intel® 10/100/1000 (802.3af/at), Total 60W |
| USB | 1 x M12 with 2 x USB 2.0 signal, 4 x USB 3.2 (Gen2) | 1 x M12 with 2 x USB 2.0 signal, 4 x USB 3.2 (Gen2) | 1 x M12 with 2 x USB 2.0 signal, 4 x USB 3.2 (Gen2) |
| COM | 2 x RS232 (Full), 1 x RS232 (Full)/422/485. (w/ isolation) | 2 x RS232 (Full), 1 x RS232 (Full)/422/485. (w/ isolation) | 2 x RS232 (Full), 1 x RS232 (Full)/422/485. (w/ isolation) |
| DIO | 4 x DI, 4 x DO(w/ isolation) | 4 x DI, 4 x DO(w/ isolation) | 4 x DI, 4 x DO(w/ isolation) |
| CAN Bus | N/A | N/A | N/A |
| DC Output | N/A | N/A | N/A |
| SIM Socket | 6 (BOM option up to 8, eSIM BOM optional) | 6 (BOM option up to 8, eSIM BOM optional) | 6 (BOM option up to 8, eSIM BOM optional) |
| WWAN | 3 (BOM option up to 4) | 3 (BOM option up to 4) | 3 (BOM option up to 4) |
| mini-PCIe Socket | - 1 x (USB 2.0, PCIe 3.0/SATA 3.0) - 1 x (USB 2.0, PCIe 3.0/SATA 3.0). BOM option to 1 x mini-PCIe (USB 2.0) for LTE - 1 x (USB 2.0) for LTE. BOM option to 1 x M.2 3042 Key B (USB 2.0, USB 3.2 (Gen2)) for LTE/5G | - 1 x (USB 2.0, PCIe 3.0/SATA 3.0) - 1 x (USB 2.0, PCIe 3.0/SATA 3.0). BOM option to 1 x mini-PCIe (USB 2.0) for LTE - 1 x (USB 2.0) for LTE. BOM option to 1 x M.2 3042 Key B (USB 2.0, USB 3.2 (Gen2)) for LTE/5G | - 1 x (USB 2.0, PCIe 3.0/SATA 3.0) - 1 x (USB 2.0, PCIe 3.0/SATA 3.0). BOM option to 1 x mini-PCIe (USB 2.0) for LTE - 1 x (USB 2.0) for LTE. BOM option to 1 x M.2 3042 Key B (USB 2.0, USB 3.2 (Gen2)) for LTE/5G |
| M.2 Socket | - 2 x M.2 3042/3050/3052 Key B (USB 2.0, USB 3.2 (Gen2)) for LTE/5G | - 2 x M.2 3042/3050/3052 Key B (USB 2.0, USB 3.2 (Gen2)) for LTE/5G | - 2 x M.2 3042/3050/3052 Key B (USB 2.0, USB 3.2 (Gen2)) for LTE/5G |
| GNSS | VIOB-GPS-02 module (u-blox NEO-M8N) | VIOB-GPS-02 module (u-blox NEO-M8N) | VIOB-GPS-02 module (u-blox NEO-M8N) |
| Power Input | DC 24V (w/o isolation) | DC 24V (w/o isolation) | DC 24~110V (w/ isolation) |
| Ingress Protection | N/A | N/A | IP65 |
| Certification | CE, FCC Class A, UKCA, EN50155 | CE, FCC Class A, UKCA, EN50155 | CE, FCC Class A, UKCA, EN50155 |
| Operating Temperature | -40°C to 70°C (OT4) | -40°C to 70°C (OT4) | -40°C to 70°C (OT4) |
| TPM | TPM 2.0 | TPM 2.0 | TPM 2.0 |
| OS | Win 10/11 64-bit, Linux (Kernel 4.x) | Win 10/11 64-bit, Linux (Kernel 4.x) | Win 10/11 64-bit, Linux (Kernel 4.x) |
| Dimensions (mm) | 260 x 256 x 84 | 260 x 256 x 84 | 260 x 256 x 110 |






Railway Computer - Box PC

| Model |  |  |
|-----------------------|---|---|
| | nROK 7252-AC8S | nROK 7252-WI2-C8S |
| CPU | 8/9th Gen Intel® Core™/Xeon® (AI Hailo-8™ onboard option) | 8/9th Gen Intel® Core™/Xeon® (AI Hailo-8™ onboard option) |
| Chipset | Intel® C246 | Intel® C246 |
| Memory | 2 x DDR4 2666 SO-DIMM, up to 64GB | 2 x DDR4 2666 SO-DIMM, up to 64GB |
| Storage | 4 x 2.5" SATA 3.0 SSD (removable, 15mm) | 2 x 2.5" SATA 3.0 SSD (removable, 15mm) |
| Second Storage | 2 x mSATA (occupied mini-PCIe socket) 1 x Removable SD 3.0 | 2 x mSATA (occupied mini-PCIe socket) 1 x Removable SD 3.0 |
| Video Out | 1 x VGA, 2 x HDMI | 1 x VGA, 2 x HDMI |
| Audio | 1 x Mic-in, 2 x Line-out (DB9) | 1 x Mic-in, 2 x Line-out (DB9) |
| Ethernet | 2 x Intel® 10/100/1000 (M12) | 2 x Intel® 10/100/1000 (M12) |
| PoE | 8 x M12 10/100/1000 (802.3af/at). Total 60W | 8 x M12 10/100/1000 (802.3af/at). Total 60W |
| USB | 1 x M12 with 2 x USB 2.0 signal, 4 x USB 3.2 (Gen2) | 1 x M12 with 2 x USB 2.0 signal, 4 x USB 3.2 (Gen2) |
| COM | 2 x RS232 (full), 1 x RS232 (full)/422/485. (w/ isolation) | 2 x RS232 (full), 1 x RS232 (full)/422/485. (w/ isolation) |
| DIO | 4 x DI, 4 x DO (w/ isolation) | 4 x DI, 4 x DO (w/ isolation) |
| CAN Bus | 1 x CAN Bus 2.0B (w/ isolation) | 1 x CAN Bus 2.0B (w/ isolation) |
| DC Output | N/A | N/A |
| SIM Socket | 6 (BOM option up to 8, eSIM BOM optional) | 6 (BOM option up to 8, eSIM BOM optional) |
| WWAN | 3 (BOM option up to 4) | 3 (BOM option up to 4) |
| mini-PCIe Socket | - 1 x (USB 2.0, PCIe 3.0/SATA 3.0) - 1 x (USB 2.0, PCIe 3.0/SATA 3.0). BOM option to 1 x M.2 3042 Key B (USB 2.0, USB 3.2 (Gen1)) for LTE/5G - 1 x (USB 2.0) for LTE. BOM option to 1 x M.2 3042/3050/3052 Key B (USB 2.0, USB 3.2 (Gen2)) for LTE/5G | - 1 x (USB 2.0, PCIe 3.0/SATA 3.0) - 1 x (USB 2.0, PCIe 3.0/SATA 3.0). BOM option to 1 x M.2 3042 Key B (USB 2.0, USB 3.2 (Gen1)) for LTE/5G - 1 x (USB 2.0) for LTE. BOM option to 1 x M.2 3042/3050/3052 Key B (USB 2.0, USB 3.2 (Gen2)) for LTE/5G |
| M.2 Socket | - 2 x M.2 3042/3050/3052 Key B (USB 2.0, USB 3.2 (Gen2)) for LTE/5G | - 2 x M.2 3042/3050/3052 Key B (USB 2.0, USB 3.2 (Gen2)) for LTE/5G |
| GNSS | VIOB-GPS-02 module (u-blox NEO-M8N) | VIOB-GPS-02 module (u-blox NEO-M8N) |
| Power Input | DC 24/36V (w/o isolation) | DC 24~110V (w/ isolation, 3-second protection against temporary voltage dips) |
| Ingress Protection | N/A | N/A |
| Certification | CE, FCC Class A, UKCA, EN50155 | CE, FCC Class A, UKCA, EN50155 |
| Operating Temperature | -40°C to 70°C (OT4) | -40°C to 70°C (OT4) |
| TPM | TPM 2.0 | TPM 2.0 |
| OS | Win 10/11 64-bit, Linux (Kernel 4.x) | Win 10/11 64-bit, Linux (Kernel 4.x) |
| Dimensions (mm) | 260 x 266 x 110 | 260 x 266 x 110 |





| Model |  |  |  |  |
|-----------------------|--|--|---|--|
| | nROK 7270-A | nROK 7270-AC4 | nROK 7270-A-H | nROK 7270-AC4-C8S |
| CPU | 12th/13th Gen Intel® Core™ | 12th/13th Gen Intel® Core™ | 12th/13th Gen Intel® Core™ | 12th/13th Gen Intel® Core™ |
| Chipset | Intel® R680E | Intel® R680E | Intel® R680E | Intel® R680E |
| Memory | 2 x DDR5 4800 SO-DIMM, up to 64GB, ECC support | 2 x DDR5 4800 SO-DIMM, up to 64GB, ECC support | 2 x DDR5 4800 SO-DIMM, up to 64GB, ECC support | 2 x DDR5 4800 SO-DIMM, up to 64GB, ECC support |
| Storage | 2 x 2.5" SATA 3.0 SSD (removable, 15mm) | 2 x 2.5" SATA 3.0 SSD (removable, 15mm) | 2 x 2.5" SATA 3.0 SSD (removable, 15mm) | 2 x 2.5" SATA 3.0 SSD (removable, 15mm) |
| Second Storage | 1 x mSATA (occupied mini-PCIe socket) 2 x M.2 Key B (occupied M.2 socket) 1 x microSD card slot, SDXC v3.01 | 1 x mSATA (occupied mini-PCIe socket) 2 x M.2 Key B (occupied M.2 socket) 1 x microSD card slot, SDXC v3.01 | 1 x mSATA (occupied mini-PCIe socket) 2 x M.2 Key B (occupied M.2 socket) 1 x microSD card slot, SDXC v3.01 | 1 x mSATA (occupied mini-PCIe socket) 2 x M.2 Key B (occupied M.2 socket) 1 x microSD card slot, SDXC v3.01 |
| Video Out | 1 x VGA, 1 x HDMI | 1 x VGA, 1 x HDMI | 1 x VGA, 1 x HDMI | 1 x VGA, 1 x HDMI |
| Audio | 1 x Mic-in, 1 x Line-out (M8) | 1 x Mic-in, 1 x Line-out (M8) | 1 x Mic-in, 1 x Line-out (M8) | 1 x Mic-in, 1 x Line-out (M8) |
| Ethernet | 2 x Intel® 10/100/1000/2500 (M12, WoL support) | 1 x Intel® 10/100/1000/2500 (M12, WoL support) | 2 x Intel® 10/100/1000/2500 (M12, WoL support) | 1 x Intel® 10/100/1000/2500 (M12, WoL support) |
| PoE | N/A | 4 x independent Intel® 2.5GbE (802.3at/af). Total 60W | N/A | 4 x independent Intel® 2.5GbE (802.3at/af, total 60W) 8 x M12 Intel® 10/100/1000 (802.3af/at). Total 60W |
| USB | 1 x M12 with 2 x USB 2.0 signal, 2 x USB 3.2 (Gen2) | 1 x M12 with 2 x USB 2.0 signal, 2 x USB 3.2 (Gen2) | 1 x M12 with 2 x USB 2.0 signal, 2 x USB 3.2 (Gen2) | 1 x M12 with 2 x USB 2.0 signal, 2 x USB 3.2 (Gen2) |
| COM | 2 x RS232 (Full)/422/485. (w/ isolation) | 2 x RS232 (full)/422/485. (w/ isolation) | 2 x RS232 (full)/422/485. (w/ isolation) | 2 x RS232 (Full)/422/485. (w/ isolation) |
| DIO | 4 x DI, 4 x DO. (w/ isolation) | 4 x DI, 4 x DO. (w/ isolation) | 4 x DI, 4 x DO. (w/ isolation) | 4 x DI, 4 x DO. (w/ isolation) |
| CAN Bus | 2 x CAN FD (w/ isolation) | 2 x CAN FD (w/ isolation) | 2 x CAN FD (w/ isolation) | 2 x CAN FD (w/ isolation) |
| DC Output | N/A | N/A | N/A | N/A |
| SIM Socket | 4 (eSIM BOM optional) | 4 (eSIM BOM optional) | 8 (eSIM BOM optional) | 4 (eSIM BOM optional) |
| WWAN | 2 | 2 | 4 | 2 |
| mini-PCIe Socket | - 1 x (USB 2.0, PCIe 3.0/SATA 3.0) | - 1 x (USB 2.0, PCIe 3.0/SATA 3.0) | - 1 x (USB 2.0, PCIe 3.0/SATA 3.0) - 1 x (USB 2.0, PCIe 3.0) | - 1 x (USB 2.0, PCIe 3.0/SATA 3.0) |
| M.2 Socket | - 2 x M.2 3042/3050/3052 Key B (USB 2.0, USB 3.2 (Gen2), SATA 3.0) for LTE/5G - 1 x M.2 2230 Key E (USB 2.0, PCIe 3.0 x2). BOM option to 1 x M.2 2230 Key E (USB 2.0, PCIe 3.0, PCIe 3.0) | - 2 x M.2 3042/3050/3052 Key B (USB 2.0, USB 3.2 (Gen2), SATA 3.0) for LTE/5G - 1 x M.2 2230 Key E (USB 2.0, PCIe 3.0 x2). BOM option to 1 x M.2 2230 Key E (USB 2.0, PCIe 3.0, PCIe 3.0) " | - 2 x M.2 3042/3050/3052 Key B (USB 2.0, USB 3.2 (Gen2), SATA 3.0) for LTE/5G - 2 x M.2 3042/3050/3052 Key B (USB 2.0, USB 3.2 (Gen1)) for LTE/5G - 1 x M.2 2230 Key E (USB 2.0, PCIe 3.0 x2). BOM option to 1 x M.2 2230 Key E (USB 2.0, PCIe 3.0, PCIe 3.0) | - 2 x M.2 3042/3050/3052 Key B (USB 2.0, USB 3.2 (Gen2), SATA 3.0) for LTE/5G - 1 x M.2 2230 Key E (USB 2.0, PCIe 3.0 x2). BOM option to 1 x M.2 2230 Key E (USB 2.0, PCIe 3.0, PCIe 3.0) |
| GNSS | VIOB-GPS-06 module (u-blox NEO-M9N) | VIOB-GPS-06 module (u-blox NEO-M9N) | VIOB-GPS-06 module (u-blox NEO-M9N) | VIOB-GPS-06 module (u-blox NEO-M9N) |
| Power Input | DC 24/36V (w/o isolation) | DC 24/36V (w/o isolation) | DC 24/36V (w/o isolation) | DC 24/36V (w/o isolation) |
| Ingress Protection | N/A | N/A | N/A | N/A |
| Certification | CE, FCC Class A, UKCA, EN50155 | CE, FCC Class A, UKCA, EN50155 | CE, FCC Class A, UKCA, EN50155 | CE, FCC Class A, UKCA, EN50155 |
| Operating Temperature | -35°C to 70°C (OT3) | -35°C to 70°C (OT3) | -35°C to 70°C (OT3) | -35°C to 70°C (OT3) |
| TPM | TPM 2.0 | TPM 2.0 | TPM 2.0 | TPM 2.0 |
| OS | Win 10/11 64-bit, Linux (Kernel 4.x) | Win 10/11 64-bit, Linux (Kernel 4.x) | Win 10/11 64-bit, Linux (Kernel 4.x) | Win 10/11 64-bit, Linux (Kernel 4.x) |
| Dimensions (mm) | 260 x 210 x 80 | 260 x 210 x 80 | 260 x 210 x 80 | 260 x 210 x 80 |

Railway Computer - Box PC

| Model | Coming soon  | Coming soon  | Coming soon  |
|-----------------------|--|--|---|
| | nROK 7271-WI | nROK 7271-WIC4 | nROK 7271-WI-H |
| System | | | |
| CPU | Intel® Core™ 12th/13th Gen | Intel® Core™ 12th/13th Gen | Intel® Core™ 12th/13th Gen |
| Chipset | Intel® R680E | Intel® R680E | Intel® R680E |
| Memory | 2 x DDR5 4800 SO-DIMM, up to 64GB, ECC support | 2 x DDR5 4800 SO-DIMM, up to 64GB, ECC support | 2 x DDR5 4800 SO-DIMM, up to 64GB, ECC support |
| Storage | 2 x 2.5" SATA 3.0 SSD (removable, 15mm) | 2 x 2.5" SATA 3.0 SSD (removable, 15mm) | 2 x 2.5" SATA 3.0 SSD (removable, 15mm) |
| Second Storage | 1 x mSATA (occupied mini-PCIe socket) 2 x M.2 Key B (occupied M.2 socket) 1 x microSD card slot, SDXC v3.01 | 1 x mSATA (occupied mini-PCIe socket) 2 x M.2 Key B (occupied M.2 socket) 1 x microSD card slot, SDXC v3.01 | 1 x mSATA (occupied mini-PCIe socket) 2 x M.2 Key B (occupied M.2 socket) 1 x microSD card slot, SDXC v3.01 |
| Video Out | 1 x VGA, 1 x HDMI | 1 x VGA, 1 x HDMI | 1 x VGA, 1 x HDMI |
| Audio | 1 x Mic-in, 1 x Line-out (M8) | 1 x Mic-in, 1 x Line-out (M8) | 1 x Mic-in, 1 x Line-out (M8) |
| Ethernet | 2 x Intel® 10/100/1000/2500 (M12, WoL support) | 1 x Intel® 10/100/1000/2500 (M12, WoL support) | 2 x Intel® 10/100/1000/2500 (M12, WoL support) |
| PoE | N/A | 4 x Independent Intel® 2.5GbE (802.3at/af). Total 60W | N/A |
| USB | 1 x M12 with 2 x USB 2.0 signal, 2 x USB 3.2 (Gen2) | 1 x M12 with 2 x USB 2.0 signal, 2 x USB 3.2 (Gen2) | 1 x M12 with 2 x USB 2.0 signal, 2 x USB 3.2 (Gen2) |
| COM | 2 x RS232 (Full)/422/485. (w/ isolation) | 2 x RS232 (Full)/422/485. (w/ isolation) | 2 x RS232 (Full)/422/485. (w/ isolation) |
| DIO | 4 x DI, 4 x DO. (w/ isolation) | 4 x DI, 4 x DO. (w/ isolation) | 4 x DI, 4 x DO. (w/ isolation) |
| CAN Bus | 2 x CAN FD (w/ isolation) | 2 x CAN FD (w/ isolation) | 2 x CAN FD (w/ isolation) |
| DC Output | N/A | N/A | N/A |
| SIM Socket | 4 (eSIM BOM optional) | 4 (eSIM BOM optional) | 8 (eSIM BOM optional) |
| WWAN | 2 | 2 | 4 |
| mini-PCIe Socket | - 1 x (USB 2.0, PCIe 3.0/SATA 3.0) | - 1 x (USB 2.0, PCIe 3.0/SATA 3.0) | - 1 x (USB 2.0, PCIe 3.0/SATA 3.0) - 1 x (USB 2.0, PCIe 3.0) |
| M.2 Socket | - 2 x M.2 3042/3050/3052 Key B (USB 2.0, USB 3.2 (Gen2), SATA 3.0) for LTE/5G - 1 x M.2 2230 Key E (USB 2.0, PCIe 3.0 x2). BOM option to 1 x M.2 2230 Key E (USB 2.0, PCIe 3.0, PCIe 3.0) | - 2 x M.2 3042/3050/3052 Key B (USB 2.0, USB 3.2 (Gen2), SATA 3.0) for LTE/5G - 1 x M.2 2230 Key E (USB 2.0, PCIe 3.0 x2). BOM option to 1 x M.2 2230 Key E (USB 2.0, PCIe 3.0, PCIe 3.0) | - 2 x M.2 3042/3050/3052 Key B (USB 2.0, USB 3.2 (Gen2), SATA 3.0) for LTE/5G - 2 x M.2 3042/3050/3052 Key B (USB 2.0, USB 3.2 (Gen1)) for LTE/5G - 1 x M.2 2230 Key E (USB 2.0, PCIe 3.0 x2). BOM option to 1 x M.2 2230 Key E (USB 2.0, PCIe 3.0, PCIe 3.0) |
| GNSS | VIOB-GPS-06 module (u-blox NEO-M9N) | VIOB-GPS-06 module (u-blox NEO-M9N) | VIOB-GPS-06 module (u-blox NEO-M9N) |
| Power | | | |
| Power Input | DC 24~110V (w/ isolation, optional 3-second protection against temporary voltage dips) | DC 24~110V (w/ isolation, optional 3-second protection against temporary voltage dips) | DC 24~110V (w/ isolation, optional 3-second protection against temporary voltage dips) |
| Ingress Protection | N/A | N/A | N/A |
| Environment | | | |
| Certification | CE, FCC Class A, UKCA, EN50155 | CE, FCC Class A, UKCA, EN50155 | CE, FCC Class A, UKCA, EN50155 |
| Operating Temperature | -35°C to 70°C (OT3) | -35°C to 70°C (OT3) | -35°C to 70°C (OT3) |
| TPM | TPM 2.0 | TPM 2.0 | TPM 2.0 |
| Others | | | |
| OS | Win 10/11 64-bit, Linux (Kernel 4.x) | Win 10/11 64-bit, Linux (Kernel 4.x) | Win 10/11 64-bit, Linux (Kernel 4.x) |
| Dimensions (mm) | 260 x 210 x 110 | 260 x 210 x 110 | 260 x 210 x 110 |

Railway Computer - Panel PC

| Model | Coming soon  |  |
|-----------------------|--|--|
| | nROK 7271-WIC4-C8S | vROK 3030 |
| System | | |
| CPU | Intel® Core™ 12th/13th Gen | |
| Chipset | Intel® R680E | |
| Memory | 2 x DDR5 4800 SO-DIMM, up to 64GB, ECC support | |
| Storage | 2 x 2.5" SATA 3.0 SSD (removable, 15mm) | |
| Second Storage | 1 x mSATA (occupied mini-PCIe socket) 2 x M.2 Key B (occupied M.2 socket) 1 x microSD card slot, SDXC v3.01 | |
| Video Out | 1 x VGA, 1 x HDMI | |
| Audio | 1 x Mic-in, 1 x Line-out (M8) | |
| Ethernet | 1 x Intel® 10/100/1000/2500 (M12, WoL support) | |
| PoE | 4 x Independent Intel® 2.5GbE (802.3at/af). Total 30W 8 x M12 Intel® 10/100/1000 (802.3at/af). Total 30W | |
| USB | 1 x M12 with 2 x USB 2.0 signal, 2 x USB 3.2 (Gen2) | |
| COM | 2 x RS232 (Full)/422/485. (w/ isolation) | |
| DIO | 4 x DI, 4 x DO. (w/ isolation) | |
| CAN Bus | 2 x CAN FD (w/ isolation) | |
| DC Output | N/A | |
| SIM Socket | 4 (eSIM BOM optional) | |
| WWAN | 2 | |
| mini-PCIe Socket | - 1 x (USB 2.0, PCIe 3.0/SATA 3.0) | |
| M.2 Socket | - 2 x M.2 3042/3050/3052 Key B (USB 2.0, USB 3.2 (Gen2), SATA 3.0) for LTE/5G - 1 x M.2 2230 Key E (USB 2.0, PCIe 3.0 x2). BOM option to 1 x M.2 2230 Key E (USB 2.0, PCIe 3.0, PCIe 3.0) | |
| GNSS | VIOB-GPS-06 module (u-blox NEO-M9N) | |
| Power | | |
| Power Input | DC 24~110V (w/ isolation, optional 3-second protection against temporary voltage dips) | |
| Ingress Protection | N/A | |
| Environment | | |
| Certification | CE, FCC Class A, UKCA, EN50155 | |
| Operating Temperature | -35°C to 70°C (OT3) | |
| TPM | TPM 2.0 | |
| Others | | |
| OS | Win 10/11 64-bit, Linux (Kernel 4.x) | |
| Dimensions (mm) | 260 x 210 x 110 | |
| Display | | |
| LCD Size | | 10.4" TFT LCD |
| Resolution | | 1024 x 768 |
| Brightness (Typ.) | | 1200cd/m² |
| Contrast Ratio | | 900:1 |
| View Angle | | V: 85/85 H: 85/85 |
| Brightness Adjustment | | Auto via light sensor (BOM optional) |
| Touch Screen | | Projected capacitive, anti-glare (BOM optional) |
| System | | |
| CPU | | Intel Atom® x6414RE, 4 Core, 1.50GHz |
| Chipset | | N/A |
| Memory | | 1 x DDR4 2666 SO-DIMM, 4GB (default) up to 32GB |
| Storage | | 1 x mSATA (occupied mini-PCIe socket) 1 x M.2 2280 Key M NVMe SSD (PCIe 3.0 x1, SATA 3.0) |
| Speaker | | N/A |
| Control Button | | BOM optional |
| Video Out | | 1 x HDMI, 1 x DP |
| Video Input | | 4 x CVBS |
| Audio | | 1 x Line-in, 2 x Line-out (DB9) |
| Ethernet | | 2 x Intel® 10/100/1000/2500 (M12) |
| PoE | | Optional |
| USB | | 1 x M12 with 2 x USB 2.0 signal, 1 x USB 3.2 (Gen 2) |
| COM | | 2 x RS232 (Full)/422/485 |
| DIO | | 4 x DI, 2 x DO (w/ isolation) |
| CAN Bus | | 1 x CAN Bus 2.0B |
| SIM Socket | | 2 |
| WWAN | | 1 |
| mini-PCIe Socket | | 1 x (USB 2.0, PCIe 3.0/SATA 3.0) |
| M.2 Socket | | - 1 x M.2 2230 Key E (USB 2.0, PCIe 3.0, PCIe 3.0) - 1 x M.2 3042/3050/3052 Key B (USB 2.0, USB 3.2 (Gen 2)) for LTE/5G |
| GNSS | | VIOB-GPS-06 module (u-blox NEO-M9N) |
| Power | | |
| Power Input | | DC 24/36V (w/o isolation) DC 24/110V (w/ isolation, optional) |
| Back Up Battery | | N/A |
| Ingress Protection | | N/A |
| Environment | | |
| Certification | | CE, FCC Class A, UKCA, EN50155 |
| Operating Temperature | | -30°C to 70°C (OT3), w/o PoE -30°C to 60°C (OT1), w/ PoE |
| TPM | | TPM 2.0 |
| Others | | |
| OS | | Win 10/11 64-bit, Linux (Kernel 4.x) |
| Mounting | | VESA 75 |
| Dimensions (mm) | | 309 x 230.6 x 67.7 |




Vehicle Network Switch


VES Series Brief Product Introduction


Product Description


VES Series is the unmanaged mobile vehicle and railway PoE switch that ensures stable network service for telematics applications. Enclosed in a fanless rugged chassis, they support a wide voltage input range, fully

operable under shock, vibration, and a harsh temperature range. The reliable mobile vehicle and railway PoE switch is certified with E-Mark and EN50155.

 EN50155 and E-Mark certification

 M12 X-coded LAN connector

 -40~70°C operating temperature

 Compact and ruggedized enclosure design

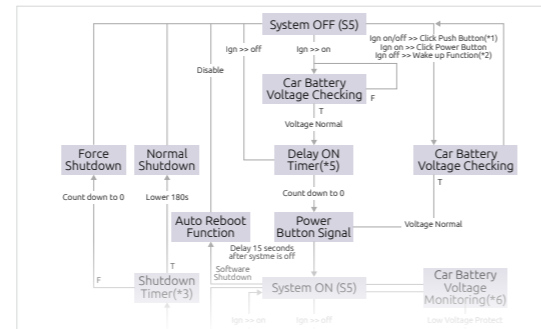
Application

- Video surveillance
- Wireless gateway
- Passenger infotainment system

Product Highlight



Dedicated for onboard vehicle/train systems







Ignition power management: power on/off delay, wide voltage input 9~36VDC, low voltage protection



Ultra-rugged enclosure, comply with MIL-STD-810H against vibration and shock impact



Rich 4/8-port IEEE 802.3af/at compliant PoE, up to 30W/port

| | NEW | NEW | NEW | NEW |
|-----------------------|---|--|---|--|
| Model |  VES31-4S |  VES31-8S |  VES31-4SR |  VES31-8SR |
| Architecture | Unmanaged GbE switch | Unmanaged GbE switch | Unmanaged GbE switch | Unmanaged GbE switch |
| PoE | 4 x 10/100/1000 (w/ 802.3af/at). Total 120W. | 8 x 10/100/1000 (w/ 802.3af/at). Total 120W. | 4 x M12 10/100/1000 (w/ 802.3af/at). Total 120W. | 8 x M12 10/100/1000 (w/ 802.3af/at). Total 120W. |
| Ethernet | 2 x 10/100/1000 | 2 x 10/100/1000 | 2 x 10/100/1000 (M12) | 2 x 10/100/1000 (M12) |
| LED | 1 x Power indicator 4 x PoE indicator 1 x Low voltage protection indicator 8 x Active/link indicator | 1 x Power indicator 8 x PoE indicator 1 x Low voltage protection indicator 12 x Active/link indicator | 1 x Power indicator 4 x PoE indicator 1 x Low voltage protection indicator 6 x Active/link indicator | 1 x Power indicator 8 x PoE indicator 1 x Low voltage protection indicator 10 x Active/link indicator |
| Power Input | DC 9V to 36V | DC 9V to 36V | DC 9V to 36V | DC 9V to 36V |
| Certification | CE, FCC Class B, UKCA, E13 | CE, FCC Class B, UKCA, E13 | CE, FCC Class B, UKCA, EN50155 | CE, FCC Class B, UKCA, EN50155 |
| Operating Temperature | -40°C to 70°C | -40°C to 70°C | -40°C to 70°C (OT4) | -40°C to 70°C (OT4) |
| Dimensions (mm) | 167 x 140 x 52 | 167 x 140 x 52 | 167 x 140 x 85 | 167 x 140 x 85 |




Vehicle Mount Computer and Display


VMC and VMD Series Brief Product Introduction


Product Description

The VMC series is a durable vehicle mount computer suitable for warehouse, ports, logistics, and material handling markets. Its IP65 rating protects against water/dust damage and its sunlight readability ensures display visibility. Optional back-up battery preserves data when car power battery fails, while wide-range power input (9~60VDC) allows for use in various facilities, forklifts, and

vehicles. The VMD series is a tough TFT LCD monitor with a resistant or projected capacitive touchscreen, ideal for in-vehicle use. Its high-brightness display and automatic brightness control make it suitable for use in various lighting conditions. With an IP65 rating it is protected against water/dust damage, and its over 1000 nits display ensures excellent visibility.

 Full IP65 compliance

 Vibration and shock resistant

 5G/LTE, Wi-Fi 6/6E, BT, CAN/OBD, GNSS + DR, and multi-SIM integration

 E-Mark certification

Application

- Fleet management
- Warehouse management
- Port management applications

Product Highlight



Wide range power input 9~60VDC



Back-up battery provides uninterrupted power






Sunlight readability & high brightness







Impact protection IK08

Vehicle Mount Computer





| Model |  |  |  | |
|-----------------|---|---|---|---|
| | VMC 110/111 | VMC 1100 | VMC 220-PC1 | |
| Display | LCD Size | 7" TFT LCD | 7" TFT LCD | 8" TFT LCD |
| | Resolution | 1024 x 600 | 800 x 480 | 1280 x 720 |
| | Brightness (Typ.) | 500cd/m² | 400cd/m² | 1000cd/m² |
| | Contrast Ratio | 800:1 | 600:1 | 1000:1 |
| | View Angle | V: 70/75 H: 75/75 | V: 50/70 H: 70/70 | V: 85/85 H: 85/85 |
| | Brightness Adjustment | Auto via light sensor | Auto via light sensor | Auto via light sensor |
| System | Touch Screen | 4-wire resistive, anti-glare | 4-wire resistive, anti-glare | Projected capacitive, anti-glare |
| | CPU | NXP i.MX6 Dual Lite, 2 Core, 800 MHz | Intel Atom® E3825, 2 Core, 1.33GHz | NXP i.MX 8M, 4 Core, 1.3 GHz |
| | Chipset | N/A | N/A | N/A |
| | Memory | 1 x 2GB DDR3L onboard | 1 x DDR3L 1600 SO-DIMM, 2GB (default) up to 8GB | 1 x LPDDR4 2400 SDRAM 3GB onboard |
| | Storage | 1 x eMMC 8GB 1 x Micro SD | 1 x SATA 3.0 SATA DOM 3.0 | 1 x eMMC 32GB 1 x Micro SD |
| | Speaker | 2 x Built-in speaker | 2 x Built-in speaker | 2 x Built-in speaker |
| | Control Button | F1~ F5 function key 1 x Power button 2 x Brightness/volume control 1 x System reset button | F1~ F5 function key 1 x Power button 2 x Brightness/volume control 1 x System reset button | F1~ F4 function key (2 x brightness/ 2 x volume control) 1 x Power button 1 x System reset button |
| | Video Out | N/A | N/A | N/A |
| | Video Input | N/A | N/A | 4 x CVBS |
| | I/O Interface | Audio | 1 x Mic-in, 1 x Line-out | 1 x Mic-in, 1 x Line-out |
| Ethernet | | 1 x Intel® 10/100/1000 | 1 x Intel® 10/100/1000 | 1 x Intel® 10/100/1000 (M12) |
| PoE | | N/A | N/A | N/A |
| USB | | 3 x USB 2.0 | 1 x USB 3.2 (Gen1) | 3 x USB 2.0 |
| COM | | 1 x RS232 (Full), 1 x RS232 (Tx, Rx)/485 | 1 x RS232 (Full), 1 x RS232 (Tx, Rx) or 1 x RS485 | 1 x RS232 (Full), 1 x RS232 (Tx, Rx), 1 x RS232 (Tx, Rx)/RS422/RS485 |
| DIO | | 3 x DI, 3 x DO | 2 x PWM, 2 x AI, 2 x DI, 2 x DO | 1 x PWM, 1 x Direction, 2 x DI, 2 x DO |
| CAN Bus | | 2 x CAN Bus 2.0B | 2 x CAN Bus 2.0B | 1 x CAN Bus 2.0B (w/ isolation) |
| SIM Socket | | 1 | 1 | 2 |
| WWAN | | 1 | 1 | 1 |
| Expansion | | mini-PCIe Socket | 1 x (USB 2.0, PCIe 2.0) 1 x (USB 2.0) for LTE | 1 x (USB 2.0, PCIe 2.0) 1 x (USB 2.0) for LTE |
| | M.2 Socket | N/A | N/A | - 1 x M.2 2230 Key E (PCIe 2.0, SDIO 3.0, UART) - 1 x M.2 3042/3050/3052 Key B (USB 3.2 (Gen1)) for LTE/5G |
| | GNSS | Onboard u-blox NEO-M8N | Onboard u-blox NEO-M8N | VI0B-GPS-02 module (u-blox NEO-M8N) |
| | Power Input | DC 9V to 36V | DC 9V to 36V | DC 9V to 60V |
| Environment | Back Up Battery | N/A | N/A | N/A |
| | Ingress Protection | Front panel IP54 | Front panel IP54 | IP65 |
| | Certification | CE, FCC Class B, UKCA, E13 | CE, FCC Class B, UKCA, E13, SAE J1113, SAE J1455, ISO7637-2, EN 60950-1 LVD | CE, FCC Class B, UKCA, E13, IK08 |
| | Operating Temperature | -20°C to 70°C | -20°C to 60°C | -40°C to 70°C |
| Others | TPM | N/A | N/A | TPM 2.0, optional |
| | OS | Android 5.1 | Win 10 64-bit, Win 8, WES8, Win 7, WES 7, Linux (Kernel 4.x) | Linux |
| | Mounting | VESA 75 | VESA 75 | VESA 75 |
| Dimensions (mm) | 213 x 145 x 40 | 213 x 145 x 50 | 250 x 179 x 68 | |



Vehicle Mount Computer




| | | Coming soon |  | |
|-----------------|-----------------------|--|---|---|
| Model | |  |  |  |
| | | VMC 320-AC0 | VMC 2020-PC1 | VMC 3020 |
| Display | LCD Size | 10.1" TFT LCD | 8" TFT LCD | 10.4" TFT LCD |
| | Resolution | 1280 x 800 | 1280 x 720 | 1024 x 768 |
| | Brightness (Typ.) | 1000cd/m ² | 1000cd/m ² | 1200cd/m ² |
| | Contrast Ratio | 800:1 | 1000:1 | 900:1 |
| | View Angle | V: 85/85 H: 85/85 | V: 85/85 H: 85/85 | V: 85/85 H: 85/85 |
| System | Brightness Adjustment | Auto via light sensor | Auto via light sensor | Auto via light sensor |
| | Touch Screen | Projected capacitive, anti-glare | Projected capacitive, anti-glare | 5-wire resistive, anti-glare |
| | CPU | NXP i.MX 8M Plus, 4 Core, 1.6GHz | Intel Atom® x7-E3950, 4 Core, 2.0GHz | Intel Atom® x5-E3930, 4 Core, 1.3GHz |
| System | Chipset | N/A | N/A | N/A |
| | Memory | 1 x LPDDR4 2133 SDRAM 3GB onboard | 1 x DDR3L 1866 SO-DIMM, 4GB (default) up to 8GB | 1 x DDR3L 1866 SO-DIMM slot 4GB (default) up to 8GB |
| I/O Interface | Storage | 1 x eMMC 16GB 1 x Micro SDXC | 1 x eMMC 64GB 1 x mSATA (occupied mini-PCIe socket) | 1 x CFast 1 x 2.5" SATA 3.0 SSD bay (9.5mm) |
| | Speaker | 2 x Built-in speaker | 2 x Built-in speaker | 2 x Built-in speaker |
| | Control Button | F1~ F5 function key (2 x brightness/ 2 x volume control, 1 x mute) | F1~ F4 function key (2 x brightness/ 2 x volume control) 1 x Power button 1 x System reset button | 1 x Power button 2 x Brightness control 2 x Volume control 5 x Function key 1 x Shift key |
| | Video Out | 1 x HDMI | N/A | N/A |
| | Video Input | N/A | 4 x CVBS (optional) | N/A |
| | Audio | 1 x Mic-in, 1 x Line-out | 1 x Mic-in, 1 x Line-out | 1 x Mic-in, 1 x Line-out |
| | Ethernet | 1 x Intel® 10/100/1000 (M12) | 1 x Intel® 10/100/1000 (M12) | 1 x Intel® 10/100/1000 |
| | PoE | N/A | N/A | N/A |
| | USB | 2 x USB 2.0 1 x USB 3.2 (Gen1) | 1 x USB 3.2 (Gen1) 2 x USB 2.0 1 x RS232 (full), 1 x RS232 (Tx, Rx), 1 x RS232 (Tx, Rx)/RS422/RS485 | 2 x USB 2.0 (5V/1.0A) 1 x Power USB (5V/1.5A, 12V/1.5A) |
| | COM | 2 x RS232 (full)/422/485 | 1 x RS232 (full), 1 x RS232 (Tx, Rx), 1 x RS232 (Tx, Rx)/RS422/RS485 | 2 x Powered RS232 (full, 5V/1.5A, 12V/1.5A) |
| | DIO | 2 x DI, 2 x DO | 1 x PWM, 1 x Direction, 2 x DI, 2 x DO | 2 x DI, 2 x DO |
| | CAN Bus | 1 x CAN FD (w/ isolation) | 1 x CAN Bus 2.0B (w/ isolation) | 1 x CAN Bus 2.0B (w/ isolation) |
| | SIM Socket | 2 | 2 | 2 |
| | WWAN | 1 | 1 | 1 |
| | mini-PCIe Socket | N/A | 1 x (USB 2.0, PCIe 2.0) 1 x (USB 2.0, PCIe 2.0/SATA 3.0) | 1 x (USB 2.0, PCIe 2.0) 1 x (USB 2.0) for LTE |
| Expansion | M.2 Socket | - 1 x M.2 2230 Key E (USB 2.0, PCIe 3.0) - 1 x M.2 3042/3050/3052 Key B (USB 3.2 (Gen1)) for LTE/5G | - 1 x M.2 3042/3050/3052 Key B (USB2.0, USB 3.2 (Gen1)) for LTE/5G | - 1 x M.2 2230 Key E (USB 2.0, PCIe 2.0, SDIO 3.0, UART) |
| | GNSS | VIOB-GPS-06 module (u-blox NEO-M9N) | VIOB-GPS-02 module (u-blox NEO-M8N) | Optional |
| Environment | Power Input | DC 9V to 60V | DC 9V to 60V | DC 9V to 60V |
| | Back Up Battery | Optional | N/A | Optional |
| | Ingress Protection | Front panel IP65 | IP65 | Front panel IP65 |
| | Certification | CE, FCC Class B, UKCA, E13, IK08 | CE, FCC Class B, UKCA, E13, IK08 | CE, FCC Class B, UKCA, E13 |
| Others | Operating Temperature | -30°C to 70°C | -30°C to 60°C | -30°C to 60°C |
| | TPM | TPM 2.0 | TPM 2.0, optional | N/A |
| | OS | Linux, Android 13.0 (Q1, 2024) | Win 10 64-bit, Linux (Kernel 4.x) | Win 10 64-bit, Linux (Kernel 4.x) |
| Mounting | VESA 75/100 | VESA 75 | VESA 75/100 | |
| Dimensions (mm) | 294 x 227.5 x 37.2 | 250 x 179 x 68 | 290 x 230 x 68 | |






| | | Coming soon | | | |
|-----------------|-----------------------|---|--|---|---|
| Model | |  |  |  |  |
| | | VMC 3021 | VMC 3030-AC0 | VMC 4020-4A0 | VMC 4020-4A1 |
| Display | LCD Size | 10.4" TFT LCD | 10.1" TFT LCD | 12.1" TFT LCD | 12.1" TFT LCD |
| | Resolution | 1024 x 768 | 1280 x 800 | 1024 x 768 | 1024 x 768 |
| | Brightness (Typ.) | 1200cd/m ² | 1000cd/m ² | 1200cd/m ² | 1200cd/m ² |
| | Contrast Ratio | 900:1 | 800:1 | 750:1 | 750:1 |
| | View Angle | V: 85/85 H: 85/85 | V: 85/85 H: 85/85 | V: 85/85 H: 85/85 | V: 85/85 H: 85/85 |
| System | Brightness Adjustment | Auto via light sensor | Auto via light sensor | Auto via light sensor | Auto via light sensor |
| | Touch Screen | 5-wire resistive, anti-glare | Projected capacitive, anti-glare | 5-wire resistive, anti-glare | 5-wire resistive, anti-glare |
| | CPU | Intel Atom® x7-E3950, 4 Core, 2.0GHz | Intel Atom® x7425E, 4 Core, 3.4GHz | Intel Atom® x7-E3950, 4 Core, 2.0GHz | Intel Atom® x7-E3950, 4 Core, 2.0GHz |
| System | Chipset | N/A | N/A | N/A | N/A |
| | Memory | 1 x DDR3L 1866 SO-DIMM slot 4GB (default) up to 8GB | 1 x DDR5 4800 SO-DIMM slot 4GB (default) up to 16GB | 1 x DDR3L 1866 SO-DIMM slot 4GB (default) up to 8GB | 1 x DDR3L 1866 SO-DIMM slot 4GB (default) up to 8GB |
| I/O Interface | Storage | 1 x CFast 1 x 2.5" SATA 3.0 SSD bay (9.5mm) | 1 x M.2 2280 Key M 1 x Micro SDXC (BOM optional) | 1 x CFast 1 x 2.5" SATA 3.0 SSD bay (9.5mm) | 1 x CFast 1 x 2.5" SATA 3.0 SSD bay (9.5mm) |
| | Speaker | 2 x Built-in speaker | 2 x Built-in speaker | 2 x Built-in speaker | 2 x Built-in speaker |
| | Control Button | 1 x Power button 2 x Brightness control 2 x Volume control 5 x Function key 1 x Shift key | F1~ F5 function key (2 x brightness/ 2 x volume control, 1 x mute) 1 x Power button 1 x System reset button | 1 x Power button 2 x Brightness control 2 x Volume control 5 x Function key 1 x Shift key | 1 x Power button 2 x Brightness control 2 x Volume control 5 x Function key 1 x Shift key |
| | Video Out | N/A | 1 x HDMI | N/A | N/A |
| | Video Input | 3 x CVBS | N/A | 3 x CVBS | 3 x CVBS |
| | Audio | 1 x Mic-in, 1 x Line-out | 1 x Mic-in, 1 x Line-out | 1 x Mic-in, 1 x Line-out | 1 x Mic-in, 1 x Line-out |
| | Ethernet | 1 x Intel® 10/100/1000 (M12) | 1 x Intel® 10/100/1000/2500 (M12) | 2 x Intel® 10/100/1000 | 2 x Intel® 10/100/1000 (M12) |
| | PoE | 1 x (802.3af/at). Total 30W (optional) | N/A | 1 x (802.3af/at). Total 30W (optional) | 1 x (802.3af/at). Total 30W (optional) |
| | USB | 2 x USB 2.0 | 1 x USB 2.0 2 x USB 3.2 (Gen2) | 2 x USB 2.0 | 2 x USB 2.0 |
| | COM | 1 x RS232 (full)/422/485, 1 x RS232 (Tx, Rx)/422/485 | 2 x RS232 (full)/422/485 | 2 x RS232 (full)/422/485 | 1 x RS232 (full)/422/485, 1 x RS232 (Tx, Rx)/422/485 |
| | DIO | 2 x DI, 2 x DO | 2 x DI, 2 x DO | 2 x DI, 2 x DO | 2 x DI, 2 x DO |
| | CAN Bus | 2 x CAN Bus 2.0B (w/ isolation) | 1 x CAN FD (w/ isolation) | 2 x CAN Bus 2.0B (w/ isolation) | 2 x CAN Bus 2.0B (w/ isolation) |
| | SIM Socket | 2 | 2 | 2 | 2 |
| | WWAN | 1 | 1 | 1 | 1 |
| | mini-PCIe Socket | 3 x (USB 2.0, PCIe 2.0) 1 x (USB 2.0) for LTE | 1 x (USB 2.0, PCIe 3.0/SATA 3.0) | 3 x (USB 2.0, PCIe 2.0) 1 x (USB 2.0) for LTE | 3 x (USB 2.0, PCIe 2.0) 1 x (USB 2.0) for LTE |
| Expansion | M.2 Socket | N/A | - 1 x M.2 3042/3050/3052 Key B (USB 2.0, USB 3.2 (Gen2)) for LTE/5G - 1 x M.2 2230 Key E (USB 2.0, PCIe 3.0 x2). BOM option to 1 x M.2 2230 Key E (USB 2.0, PCIe 3.0, PCIe 3.0) | N/A | N/A |
| | GNSS | VIOB-GPS-02 module (u-blox NEO-M8N) | VIOB-GPS-06 module (u-blox NEO-M9N) | VIOB-GPS-02 module (u-blox NEO-M8N) | VIOB-GPS-02 module (u-blox NEO-M8N) |
| Environment | Power Input | DC 9V to 60V | DC 9V to 60V | DC 9V to 60V | DC 9V to 60V |
| | Back Up Battery | Optional | Optional | Optional | Optional |
| | Ingress Protection | IP65 | Front panel IP65 | Front panel IP65 | IP65 |
| | Certification | CE, FCC Class B, UKCA, E13 | CE, FCC Class B, UKCA, E13, IK08 | CE, FCC Class B, UKCA, E13 | CE, FCC Class B, UKCA, E13 |
| Others | Operating Temperature | -30°C to 60°C | -30°C to 60°C | -30°C to 60°C | -30°C to 60°C |
| | TPM | N/A | TPM 2.0 | N/A | N/A |
| | OS | Win 10 64-bit, Linux (Kernel 4.x) | Win 10/11 64-bit, Linux (Kernel 4.x) | Win 10 64-bit, Linux (Kernel 4.x) | Win 10 64-bit, Linux (Kernel 4.x) |
| Mounting | VESA 75/100 | VESA 75/100 | VESA 75/100 | VESA 75/100 | |
| Dimensions (mm) | 290 x 230 x 68 | 294 x 227.5 x 54 | 340 x 262 x 75 | 340 x 262 x 75 | |



Vehicle Mount Display

| Model |  |  |  |
|-----------------------|---|--|--|
| | VMD 1001 | VMD 2000 | VMD 2002 |
| LCD Size | 7" TFT LCD | 8" TFT LCD | 8" TFT LCD |
| Resolution | 800 x 480 | 800 x 600 | 800 x 600 |
| Brightness (Typ.) | 500cd/m² | 400cd/m² | 400cd/m² |
| Contrast Ratio | 600:1 | 500:1 | 500:1 |
| View Angle | V: 60/60 H: 70/70 | V: 50/70 H: 70/70 | V: 50/70 H: 70/70 |
| Brightness Adjustment | Auto via light sensor | Auto via light sensor | Auto via light sensor |
| Touch Screen | 4-wire resistive, anti-glare | 4-wire resistive, anti-glare | 4-wire resistive, anti-glare |
| Speaker | 2 x Built-in speaker | 2 x Built-in speaker | 2 x Built-in speaker |
| Camera | N/A | N/A | N/A |
| Control Button | 1 x Monitor power button 2 x Brightness control 2 x Volume control | 1 x Monitor power button 2 x Brightness control 2 x Volume control | 1 x Monitor power button 2 x Brightness control 2 x Volume control |
| Video Input | VGA | Integrated LVDS CONN (LVDS, USB, 12V) | Integrated DVI CONN (VGA, USB, 12V) |
| Audio | 1 x Line-in (lateral side) 1 x Line-out (lateral side) | 1 x Line-out (lateral side) 1 x Mic-in (lateral side) 1 x Line-in (bottom side) 1 x Mic-out (bottom side) | 1 x Line-out (lateral side) 1 x Mic-in (lateral side) 1 x Line-in (bottom side) 1 x Mic-out (bottom side) |
| USB | 2 x USB 2.0 | 1 x USB 2.0 | 1 x USB 2.0 |
| Remote Power Button | N/A | Remotely power on/off VTC, MVS & ATC | N/A |
| Power Input | DC 9V to 36V | DC 12V (via LVDS) | DC 9V to 36V |
| Ingress Protection | Front panel IP54 | Front panel IP54 | Front panel IP54 |
| Certification | CE, FCC Class B, UKCA | CE, FCC Class B, UKCA | CE, FCC Class B, UKCA |
| Operating Temperature | -20°C to 70°C | -20°C to 60°C | -20°C to 60°C |
| Mounting | VESA 75 | VESA 75 | VESA 75 |
| Dimensions (mm) | 182 x 138 x 36.3 | 207 x 173 x 36.7 | 207 x 173 x 36.7 |







| Model |  |  |  |
|-----------------------|---|---|---|
| | VMD 2003 | VMD 3002-BS2 | VMD 3110 |
| LCD Size | 8" TFT LCD | 10.4" TFT LCD | 10.4" TFT LCD |
| Resolution | 800 x 600 | 1024 x 768 | 1024 x 768 |
| Brightness (Typ.) | 1000cd/m² | 1200cd/m² | 1200cd/m² |
| Contrast Ratio | 500:1 | 900:1 | 900:1 |
| View Angle | V: 60/60 H: 70/70 | V: 85/85 H: 85/85 | V: 85/85 H: 85/85 |
| Brightness Adjustment | Auto via light sensor | Auto via light sensor | Auto via light sensor |
| Touch Screen | 4-wire resistive, anti-glare | Projected capacitive | Projected capacitive |
| Speaker | 2 x Built-in speaker | 2 x Built-in speaker | 2 x Built-in speaker |
| Camera | N/A | N/A | N/A |
| Control Button | 1 x Monitor power button 2 x Brightness control 2 x Volume control | 1 x Monitor power button 1 x OSD menu 2 x Brightness control 2 x Volume control 1 x Auto config | 1 x Monitor power button 1 x OSD menu 2 x Brightness control 2 x Volume control 1 x Auto config |
| Video Input | ultraONE+, 4 x CVBS | VGA, 4 x CVBS | ultraONE+, 4 x CVBS |
| Audio | 1 x Line-out (lateral side) 1 x Mic-in (lateral side) | 1 x Line-in | 1 x Line-in |
| USB | 1 x USB 2.0 | 1 x USB 2.0 | 1 x USB 2.0 |
| Remote Power Button | Remotely power on/off VTC, MVS & ATC | N/A | Remotely power off VTC, MVS & ATC |
| Power Input | DC 24V (via ultraONE+) | DC 9V to 36V | DC 24V (via ultraONE+) |
| Ingress Protection | Front panel IP54 | IP65 | IP65 |
| Certification | CE, FCC Class B, UKCA | CE, FCC Class B, UKCA | CE, FCC Class B, UKCA |
| Operating Temperature | -20°C to 60°C | -20°C to 60°C | -20°C to 60°C |
| Mounting | VESA 75 | VESA 75/100 | VESA 75/100 |
| Dimensions (mm) | 207 x 173 x 36.7 | 256.5 x 202.1 x 31.5 | 256.5 x 202.1 x 31.5 |





Add-on Modules and Devices

| Model |  |  |  |  |  |
|------------------------------|---|---|---|--|---|
| Description | CANBus 2.0B or OBD SAE J1939 module | Dual CANBus 2.0B module | SAE J1708 module | OBD SAE J1939 module | mini-PCIe to M.2 converter module |
| Input I/F | UART | USB 2.0 | USB 2.0 | USB 2.0 | USB 2.0, PCIe 3.0 |
| Input Connector | 2 x 5-pin wafer | mini-PCIe Socket | mini-PCIe Socket or USB wafer | mini-PCIe Socket or USB wafer | mini-PCIe |
| Output I/F | CANBus 2.0B or OBD SAE J1939 | CANBus 2.0B | SAE J1708/J1587/J1922 | OBD SAE J1939 | M.2 2230 Key E |
| Output Connector | 2 x 5-pin wafer | 6-pin wafer to DB9 | 3-pin wafer to DB9 | 3-pin wafer to DB9 | M.2 (socket) |
| Operating Temperature | -40°C to 85°C | -40°C to 85°C | -40°C to 85°C | -40°C to 85°C | -40°C to 85°C |
| Form Factor | Proprietary | Full-size mini-PCIe | Full-size mini-PCIe | Full-size mini-PCIe | Full-size mini-PCIe |
| Dimensions (mm) | 50 x 28 | 51 x 30 | 51 x 30 | 51 x 30 | 51 x 30 |
| Remark | CANBus 2.0B & SAE J1939 election by switch | - | - | - | - |







| Model |  |  |  |  |
|------------------------------|--|--|---|---|
| Description | u-blox M8N module | u-blox M9N module | u-blox M8L module | u-blox M9V module |
| Input I/F | UART | UART | UART | USB/UART |
| Input Connector | 6-pin wafer | 6-pin wafer | 6-pin wafer | 6-pin wafer |
| Output I/F | UART | UART | UART | USB/UART |
| Output Connector | 6-pin wafer | 6-pin wafer | 6-pin wafer | 6-pin/8-pin wafer |
| Operating Temperature | -40°C to 85°C | -40°C to 85°C | -40°C to 85°C | -40°C to 85°C |
| Form Factor | Proprietary | Proprietary | Proprietary | Proprietary |
| Dimensions (mm) | 25.4 x 25.4 | 25.4 x 25.4 | 25.4 x 25.4 | 25.4 x 25.4 |
| Remark | Baud Rate: 9600. u-blox NEO-M8N GNSS supports with GPS + QZSS, GLONASS, Galileo and BeiDou. 3 of concurrent GNSS | Baud Rate: 38400. u-blox NEO-M9N GNSS supports with GPS + QZSS/SBAS, GLONASS, Galileo and BeiDou. 4 of concurrent GNSS | - Baud Rate: 9600. u-blox NEO-M8L-06B GNSS support with GPS, GLONASS, Galileo, BeiDou and QZSS - Automotive Dead Reckoning (ADR) - With battery | - Baud Rate: 38400. u-blox NEO-M9V-20B GNSS supports with GPS, GLONASS, Galileo, BeiDou and QZSS - Support ADR and UDR - With battery |



| Model |  |  |  |  |  |
|------------------------------|---|---|---|--|---|
| Description | M.2 to mini-PCIe converter module | mini-PCIe to M.2 converter module | 2 x Mic-in & 2 x Line-out module | Dual port 10GbE module with SFP+ for aROK 5510 | External attachable power isolation kit VTK 6222-APK: 24VDC VTK 6222-FPK: 110VDC |
| Input I/F | USB 2.0, USB 3.0 | USB 2.0, USB 3.2 (Gen1) | USB 2.0 | PCIe 3.0 | VTK 6222-APK: 24VDC VTK 6222-FPK: 110VDC |
| Input Connector | M.2 Key B + M | mini-PCIe | mini-PCIe Socket or USB wafer | PCIe 3.0 x8 | M12 (5-pin) |
| Output I/F | mini-PCIe | M.2 3042/3050/3052 Key B | 2 x Mic-in 2 x Line-out | Dual port SFP+, 10/1GbE | 24VDC |
| Output Connector | mini-PCIe (socket) | M.2 (socket) | 1 x 10-pin wafer to DB15 | 2 x SFP+ | M12 (5-pin) |
| Operating Temperature | -40°C to 85°C | -40°C to 85°C | -40°C to 85°C | -40°C~70°C | -40°C to 70°C |
| Form Factor | M.2 3042/3052 Key B + M | Full-Size mini-PCIe | Full-size mini-PCIe | Proprietary | Proprietary |
| Dimensions (mm) | 62 x 31 | 65 x 30 | 51 x 30 | 96.7 x 181.5 x 37.4 | 120 (W) x 198 (D) x 50 (H) |
| Remark | Only for LTE module | USB 3.2 (Gen1) depended by airbord | - | Only for aROK 5510 | Only for nROK 6222 |



| Model |  |  |  |  |
|------------------------------|---|---|--|---|
| Description | Vehicle relay module | External attachable power isolation kit | Smart backup battery kit | Smart UPS with SuperCap |
| Input I/F | USB 2.0 or RS-232 (Tx/Rx) | 24VDC | 9~36VDC | 9~60VDC |
| Input Connector | USB type A or DB9 | M12 (5-pin) | 3-pin terminal block | 5-pin terminal block |
| Output I/F | 4 x Relay 4 x DI 4 x DO 1 x Analog input 1 x Frequency input | 24VDC | 10~12VDC (from backup battery) 9~36VDC (from vehicle battery) Communication: RS232/SMBus | 12/24VDC (from backup SuperCap) 9~60VDC (from vehicle battery) Communication: RS232 |
| Output Connector | Terminal block | M12 (5-pin) | Power: 3 Pin terminal block Communication: 2 x 5-pin | Power: 6 Pin terminal block Communication: DB9 |
| Operating Temperature | -40°C to 85°C | -40°C to 70°C | Charging: 0°C to 45°C Discharging: 0°C to 55°C | Charging: -35°C to 80°C Discharging: -40°C to 80°C |
| Form Factor | Proprietary | Proprietary | Proprietary | Proprietary |
| Dimensions (mm) | 126 (W) x 124 (D) x 24 (H) | 213 x 167 x 40 | 1). 280 (W) x 150 (D) x 42.2 (H) 2). 297.3 (W) x 175 (D) x 39 (H) | 235 (W) x 134.5 (D) x 50 (H) |
| Remark | It is remotely controlled through USB or RS-232 communication | - VTK PWA20-01 for ATC 3750-C6 - VTK PWA10-01 for ATC 3540-IP7-C4 | Capacity: 9000 mAh (Li-Ion) 60W output | - Nominal 24V@8A max (200W, 1 x master + 3 x slave) - For in-vehicle VTK-SCAP-M (master), VTK-SCAP-S (slave) - For Railway VTK-SCAP-AR-M (master), VTK-SCAP-S (slave) |




HDMI over IP Extender


VIP Series Brief Product Introduction


Product Description


VIP Series is a new E-Mark certified in-vehicle HDMI extender over IP solution designed with 9~36VDC wide voltage input range, specifically for railway and bus public transport Passenger infotainment System.

VIP Series works over standard networking devices with wide operating temperature support, and outputs to multiple Full HD HDMI displays up to 100m.

 Wide-range 9-36Vdc input voltage

 Unicast and daisy chain support

 E-Mark for in-vehicle application

 Dual Full HD HDMI output

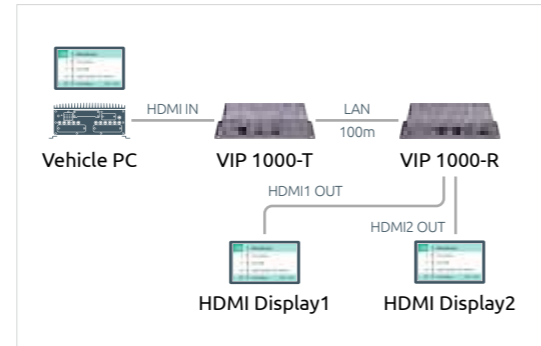
Application

- Video on demand
- Passenger infotainment system

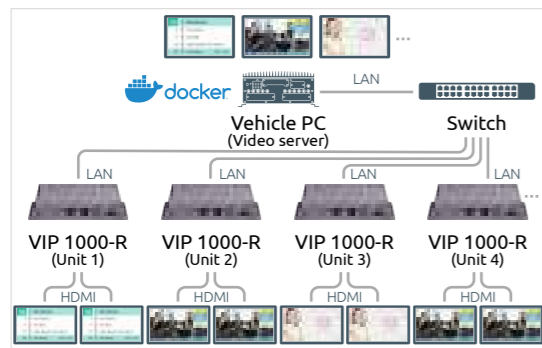
Product Highlight



Dedicated for in-vehicle & railway PIS application





Support dual Full HD HDMI output + Up to 100 meter distance



RTSP video on demand with Docker platform



Easy to use. Plug and play!

| | | |
|-----------------------|--|--|
| |  VIP 1000-T |  VIP 1000-R |
| Model | Transmitter | Receiver |
| Function | Transmitter | Receiver |
| Video In | 1 x FHD HDMI Type A | 1 x 10/100/1000 |
| Video Out | 1 x 10/100/1000 | 2 x FHD HDMI Type A |
| Protocol | TCP/IP | TCP/IP |
| Model | Unicast, daisy chain and multicast mode | Unicast, daisy chain and multicast mode |
| USB | 1 x USB 2.0 OTG | 1 x USB 2.0 |
| Ethernet | 1 x 10/100/1000 | 2 x 10/100/1000 LAN switch |
| Power Input | DC 9V to 36V | DC 9V to 36V |
| Ignition Control | Yes | Yes |
| Certification | CE, FCC Class A, UKCA, E13 | CE, FCC Class A, UKCA, E13 |
| Operating Temperature | -20°C to 70°C | -20°C to 70°C |
| Dimensions (mm) | 130 x 100 x 31 | 130 x 100 x 31 |



About NEXCOM

Reliable Partner for the AIoT Digital Transformation Solutions

Committed to Customer Success

Founded in 1992 and headquartered in Taipei, Taiwan, NEXCOM is committed to being a trustworthy partner in building the AIoT digital transformation solutions. To surpass customers' expectations, NEXCOM sets itself apart by leveraging its decades of experience in industrial computing, a highly talented R&D team, and exceptional customer service. With these core strengths, NEXCOM has enabled its customers to win key projects in a diverse range of industries.

With its focus on delivering these core values to better serve customers, NEXCOM integrates its capabilities and operates six global businesses: IoT Automation Solutions (IAS), Intelligent Video Surveillance (IDS), Intelligent Platform @ Smart City (IPS), Mobile Computing Solutions

(MCS), Medical & Healthcare Informatics (MHI), Network and Communication Solutions (NCS). This strategic deployment enables NEXCOM to offer time-to-market, time-to-solution products and services without compromising on cost.

In addition, the service-to-market business model gives NEXCOM core competence in building a strong world-class service network by providing customized service, global logistics, local access, and real-time support. Operating six subsidiaries in China, Japan, Taiwan, and the United States, NEXCOM is able to better accommodate customers' requirements as well as closely work with global partners in different regions.

Partners can also be assured that NEXCOM's Taiwan-based Headquarters and subsidiary offices in China and the USA have obtained ISO 9001:2015 Certification.



| | |
|------------|--|
| IAS | IoT Automation Solutions: Industrial Automation & I4.0 Execution, Intelligent Edge, Gateway & EWR, Industrial Robot Control, EtherCAT Motion Solutions, Wireless & Embedded Solutions for Industrial IoT |
| IDS | Intelligent Video Surveillance: IP Video Surveillance Cameras, Mobile Cameras, ANPR/LPR Network Cameras, Panoramic Cameras, NVR Server Platform |
| IPS | Intelligent Platform @ Smart City: Smart City, Smart Retail, Digital Signage, Interactive Kiosks, Hospitality, Gateway, Edge AI, and ODM Customization Services |
| MCS | Mobile Computing Solutions: Edge AI Telematics Computer, Vehicle Telematics Computer, Railway Computer, Vehicle Mount Computer, Vehicle Mount Display, In-Vehicle Networking, In-Vehicle HDMI Extender over IP, Fitness Console |
| MHI | Medical and Healthcare Informatics: Total Solutions with a Variety of Medical IT Systems |
| NCS | Network and Communication Solutions: Cyber Security, HPC, Telecommunications, Storage, SDN/NFV, 5G, uCPE, ICS Security |

Corporate Vision

To become the industrial leader in providing AIoT digital transformation solutions, NEXCOM utilizes its industry leading technology, localized customer support and worldwide logistics services. This will be achieved by:

- Great team work
- Cooperation with trusted partners
- Growth through innovation

Corporate Mission

- An AIoT digital transformation supplier in vertical application markets
- A quality partner in engineering, manufacturing and services

Business Strategy

Aiming to better support the activities of all its partners, NEXCOM divides its sales force into six dedicated business units to target rapidly expanding vertical markets. This enables each business unit to focus on strategic channel accounts and repeat order business. Moreover, NEXCOM will provide customers with co-marketing strategies, technical support, ODM services, and project support, which are frequently required everywhere.

NEXCOM has already become a business group focused on innovating comprehensive solutions for Industry 4.0. We help our customers deliver vertical solutions optimized for 5G, AI, AIoT, and Industry 4.0 solutions.

Global Fulfillment Service

Product delivery and customer support are always more effective when delivered locally. NEXCOM localizes support and provides a global customer service network to handle all aspects of global business, from presales, order taking, and system assembly to logistics. For expeditious product delivery, NEXCOM has established four regional service centers: Taiwan (for Asia), USA (for North America and South America), and China. Therefore, NEXCOM customers benefit from quality assured product assembly and four service centers.

NEXCOM has invested heavily to establish operational infrastructures, including advanced equipment and facilities, not only at its global headquarters but also at subsidiary offices. Today, each of our service centers, with ISO 9001:2008 certification, has a purpose built assembly line, RMA/ DOA center and warehouse storage capability.

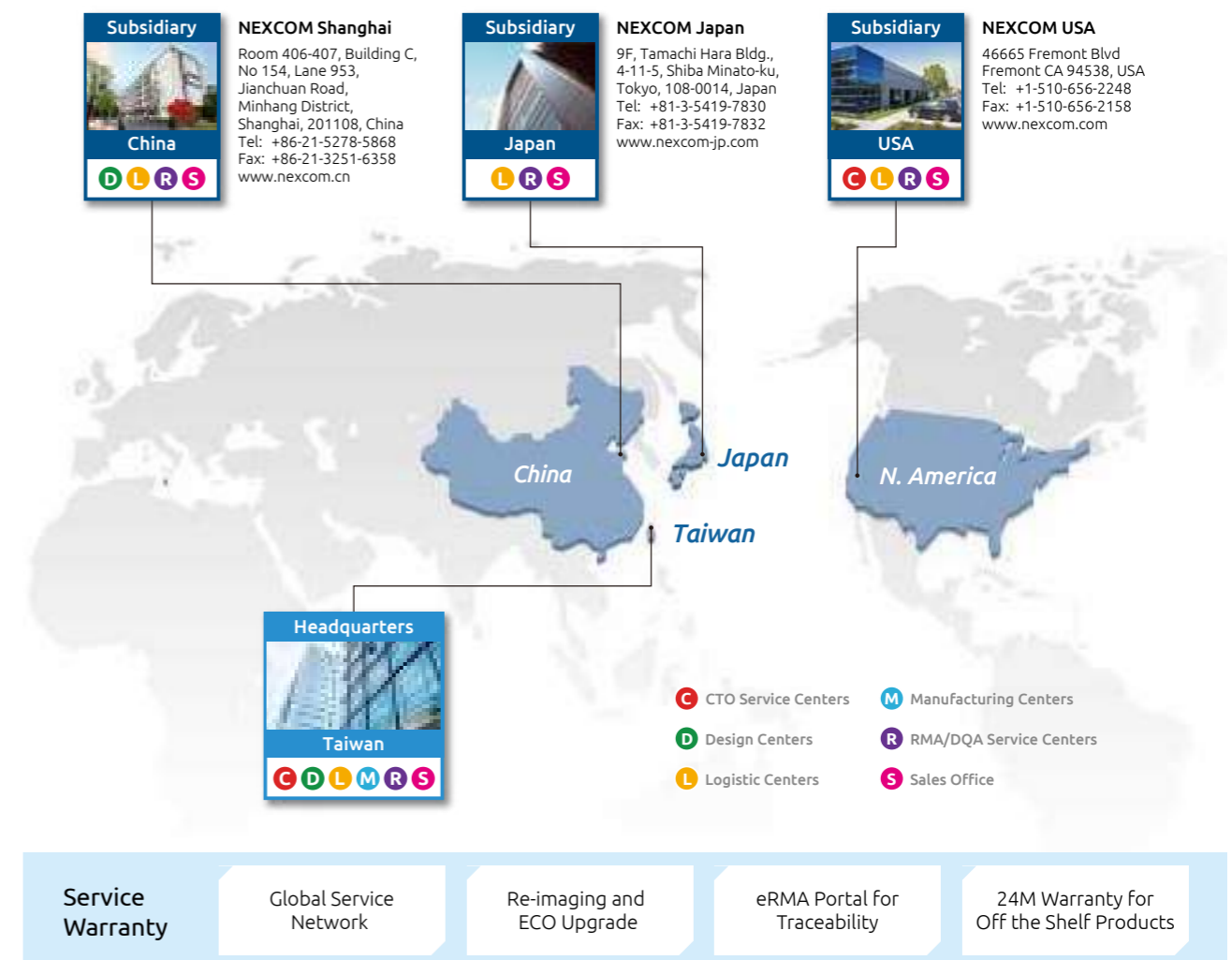
Quality Assurance

Under a strict Quality Assurance System, product design and reliability are controlled to support all critical solutions, and ensure Total Quality Assurance (TQA) implementation for all NEXCOM

products and services. Additionally, NEXCOM's technical support team is aligned with ISO 27001 requirements, as they aim to provide timely feedback within 24 hours to resolve technical issues efficiently. This ensures that any potential information security incidents are addressed promptly, minimizing the impact and downtime for customers.

Green Policy

As a global citizen, NEXCOM places great importance on environmental issues. We are committed to ensuring that our products and services comply with environmental standards and regulations. NEXCOM actively responds to energy-saving and carbon reduction initiatives, prioritizes environmental protection in our operational activities, and holds certificate such as ISO 14064-1 greenhouse gas inventory and ISO 14001 environmental management system. We implement voluntary greenhouse gas inventory, reduce resource and energy consumption, and mitigate environmental risks. We also measure NEXCOM's sustainability and corporate responsibility as an Earth-friendly enterprise through ESG evaluation. NEXCOM will continue to collaborate with peers and suppliers to strive for purification standards, compatibility of technologies, and operational processes to help reduce the potential hazardous substances in our products and manufacturing processes.



Service details may vary by country. Please contact us for more details.

Headquarters

NEXCOM International Co., Ltd.

9F, No.920, Zhongzheng Rd., Zhonghe District, New Taipei City, 23586, Taiwan, R.O.C.
Tel: +886-2-8226-7786
Fax: +886-2-8226-7782
www.nexcom.com

Asia

Taiwan

NexAIoT Co., Ltd.

Taipei Office

13F, No.922, Zhongzheng Rd.,
Zhonghe District,
New Taipei City, 23585, Taiwan, R.O.C.
Tel: +886-2-2886-7796
Fax: +886-2-8226-7926
Email: jacobhuang@nexaiot.com
www.nexaiot.com

NexAIoT Co., Ltd.

Taichung Office

16F, No.250, Sec. 2, Chongde Rd.,
Beitun Dist.,
Taichung City, 406, Taiwan, R.O.C.
Tel: +886-4-2249-1179
Fax: +886-4-2249-1172
Email: jacobhuang@nexaiot.com
www.nexaiot.com

NexCOBOT Taiwan Co., Ltd.

13F, No.916, Zhongzheng Rd.,
Zhonghe District,
New Taipei City, 23586, Taiwan, R.O.C.
Tel: +886-2-2886-7786
Fax: +886-2-2886-7726
Email: jennyshern@nexcobot.com
www.nexcobot.com

GreenBase Technology Corp.

13F, No.922, Zhongzheng Rd.,
Zhonghe District,
New Taipei City, 23586, Taiwan, R.O.C.
Tel: +886-2-2886-7786
Fax: +886-2-2886-7900
Email: vivianlin@nexcom.com.tw
www.nexcom.com.tw

DivioTec Inc.

19F-1, No.97, Sec. 4, ChongXin Rd.,
SanChong Dist.,
New Taipei City, 24161 Taiwan, R.O.C.
Tel: +886-2-8976-3077
Email: sales@diviotec.com
www.diviotec.com

AIOT CLOUD CORP.

13F, No.922, Zhongzheng Rd.,
Zhonghe District,
New Taipei City, 23586, Taiwan, R.O.C.
Tel: +886-2-2886-7786
Fax: +886-2-2886-7982
Email: support@aiotcloud.dev
www.aiotcloud.dev

EMBUX Technology Co., Ltd.

13F, No.916, Zhongzheng Rd.,
Zhonghe District,
New Taipei City, 23586, Taiwan, R.O.C.
Tel: +886-2-2886-7786
Fax: +886-2-2886-7782
Email: info@embux.com
www.embux.com

TMR Technologies Co., Ltd.

13F, No.916, Zhongzheng Rd.,
Zhonghe District,
New Taipei City, 23586, Taiwan, R.O.C.
Tel: +886-2-2886-7786
Fax: +886-2-2886-7782
Email: services@tmrtek.com
www.tmrtek.com

China

NEXCOM Shanghai

Room 406-407, Building C, No 154, Lane 953,
Jianchuan Road, Minhang District,
Shanghai, 201108, China
Tel: +86-21-5278-5868
Fax: +86-21-3251-6358
Email: sales@nexcom.cn
www.nexcom.cn

NEXCOM Surveillance Technology Corp.

Floor 8, Building B3, Xiufeng Industrial Zone,
GanKeng Community, Buji Street,
LongGang District,
ShenZhen, 518112, China
Tel: +86-755-8364-7768
Fax: +86-755-8364-7738
Email: steveyang@nexcom.com.tw
www.nexcom.cn

Beijing NexGem

Technology Co.,Ltd.

Floor 2, Gemotech Building,
No.1, Development Rd.,
Changping International
Information Industry Base,
Changping District,
Beijing, 102206, China
Tel: +86-10-8072-2025
Fax: +86-10-8072-2022
Email: sales@nexgemo.cn
www.nexgemo.cn

Japan

NEXCOM Japan

9F, Tamachi Hara Bldg.,
4-11-5, Shiba Minato-ku,
Tokyo, 108-0014, Japan
Tel: +81-3-5419-7830
Fax: +81-3-5419-7832
Email: sales@nexcom-jp.com
www.nexcom-jp.com

America

USA

NEXCOM USA

46665 Fremont Blvd
Fremont CA 94538, USA
Tel: +1-510-656-2248
Fax: +1-510-656-2158
Email: sales@nexcom.com
www.nexcom.com



Committed to Customer Success

Please verify specifications before quoting. This guide is intended for reference purpose only.
All product specifications and information are subject to change without notice.

No part of this publication may be reproduced in any form or by any means without prior written permission of the publisher.
All brand and product names are registered trademarks of their respective companies.

©NEXCOM International Co., Ltd. 2024