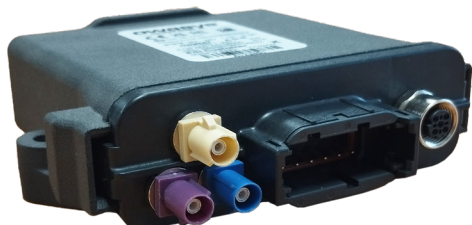


owa347A



Peak performance in the toughest environments
Bring high-end intelligence to every rugged mile.



Rugged IoT Embedded Linux Platform

owa347A Core:

- ARM Cortex A7 32 bit 792 MHz
- Secure Boot
- 512MB DDR3
- 512MB NAND Flash
- Optional eMMC for additional storage
- Yocto Project Fyle System

Key Features:

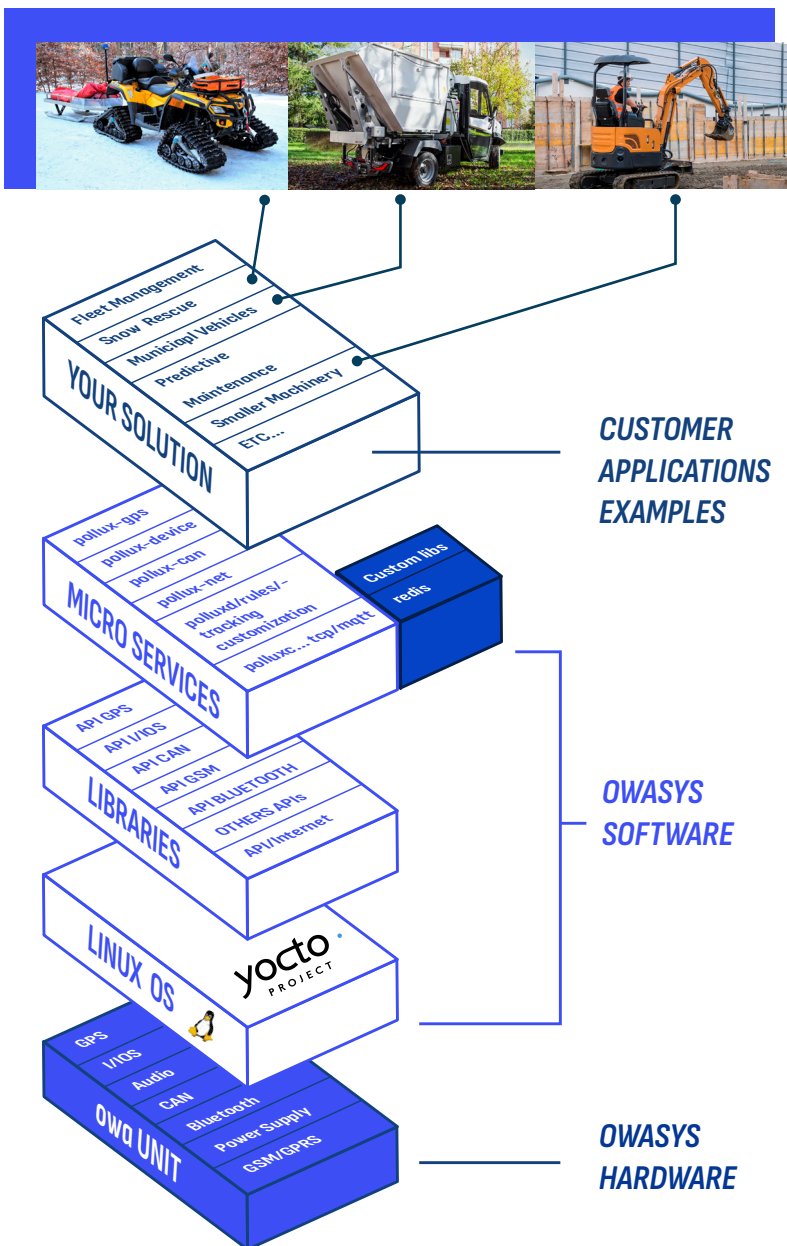
- CAN (up to 3 interfaces)
- Ethernet 10/100Mbps (M12 D code)
- USB 2.0 (Operation & Maintenance)
- Programable 3 Axis Accelerometer
- 4 multipurpose DIOs:
 - 4 Digital output open drain 200 mA
 - 4 Digital input 0 to 50 V
 - 3 Analog input 0 to 30 V
- Nano SIM/MFF2
- Low Power Modes
- Battery backup (optional)
- TPM 2.0 (optional)
- IP67 Enclosure

Wireless Interfaces:

- GNSS (GPS+GLONASS+GALILEO+BDS+QZSS)
- Cellular Communications:
 - LTE Cat 1 bis 3GPP Release 14
- External Antennas (Fakra)
- Optional WiFi&Bluetooth:
 - WiFi 6- 802.11 a/b/g/n/ac/ax
 - BT 5.4
- Optional Internal Antennas

Mechanics

- IP67
- 118,8mm x 37,5mm x 112,8mm



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Time to wireless!!

BOK 000 3701-PA_owa347A Datasheet

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HMS GROUP MEMBER

**CPU**

- ARM Cortex A7 at 792MHz clock speed.
- Yocto Project File System*
- DDR3 512MB RAM
- NAND FLASH 512MB
- Optional eMMC for additional storage
- Optional TPM 2.0

* For more information about OS and kernel, visit our Developers' zone or contact your Owasys Account Manager.

GNSS

- Receiver: GPS/GLONASS/GALILEO/QZSS/BDS
- SBAS: WAAS, EGNOS, MSAS, GAGAN
- Update Rate: up to 10Hz.
- Accuracy: <2.5 meters CEP.
- Signal Acquisition:
 - Cold Start: 33 s.
 - Hot Start: < 1 s.
- Sensitivity:
 - 161dbm tracking,
 - 156dbm adquisition
- Active Antenna Power Supply: +1.8 ~ 3.3V

LTE Cat 1 bis 3GPP Release 14

- LTE-FDD bands: B1/B2/B3/B4/B5/B7/B8/B12/B13/B18/B19/B20/B25/B26/B28/B66
- LTE-TDD bands: B34/B38/B39/B40/B41
- DL 10M bps, UL 5 Mbps

Interfaces

- Up to 3 CAN bus
 - 2 CAN bus supporting full speed 1Mbps CAN 2.0B
 - 1 CAN FD supporting 5 Mbps
- K-line bus
- Ethernet 10/100Base-TX
- Maxim 1-Wire
- USB Host 2.0
- 1 external RS232 ports. 2 pins:
 - 1 x (TX/RX) CONSOLE
- Up to 1 RS485 port
- Integrated sensors
 - Programmable 3 axis sensor, accelerometer
 - Optional Programmable 6 axis sensor, accelerometer & gyroscope
- Configurable digital input/outputs:
 - 4 INPUTS:
 - 50V max inputs (logic low <1.5V, high >3V)
 - 4 inputs function as wake signals for low power modes
 - All inputs can be used as counters (odometer). 32bit, 3Khz max.
 - 4 open collector outputs (200mA each)
 - Short-circuit protection for all outputs
 - 3 analog inputs:
 - 12 bit resolution, 1% accuracy
 - Multiplexed with digital I/O pins
 - 0–30V range
- FAKRA antenna connectors or internal antennas
- 4 LEDs for status indication

* Availability of features depends on models

Power Supply:

- Nominal range of 9V to 48V.
- Typical consumption at 24V:

OFF	TBD
Standby	TBD
RUN	TBD
RUN + GSM + GPS	TBD

Batteries

- Back-up when there is no power supply available.
- Standard backup battery for RTC. Duration 10 years.
- Optional rechargeable Li-Ion 3.7V.
- Inserted via rear battery cover.

Temperature

Safety Purposes Operating Temperature Range without Li-ion Battery	–40 °C to +73 °C*
Safety Purposes Operating Temperature Range with Li-ion Battery	–40 °C to +53 °C (from external power supply) –20 °C to +53 °C (battery can power the unit)** 0 °C to +45 °C (battery will be charged if external power available)

* Industrial temperature range components –40 °C to 85 °C

** (–40 °C to –20 °C internally limited with battery protection during discharge)

Enclosure

- Environmental protection to IP67 standard.
- Dimension: L=112,8 x W=118,8 x H=37,5 mm.
- Weight: TBD
- Material: PBT GF
- System connectors: AT13M-12 [12 way]
- NanoSIM
- Ethernet M12

Development Kit

Includes: Developer's board owa347, power supply cables, cables for interfaces, antennas, web access to developers area: cross compiler, API, libraries, manuals and application notes.

