



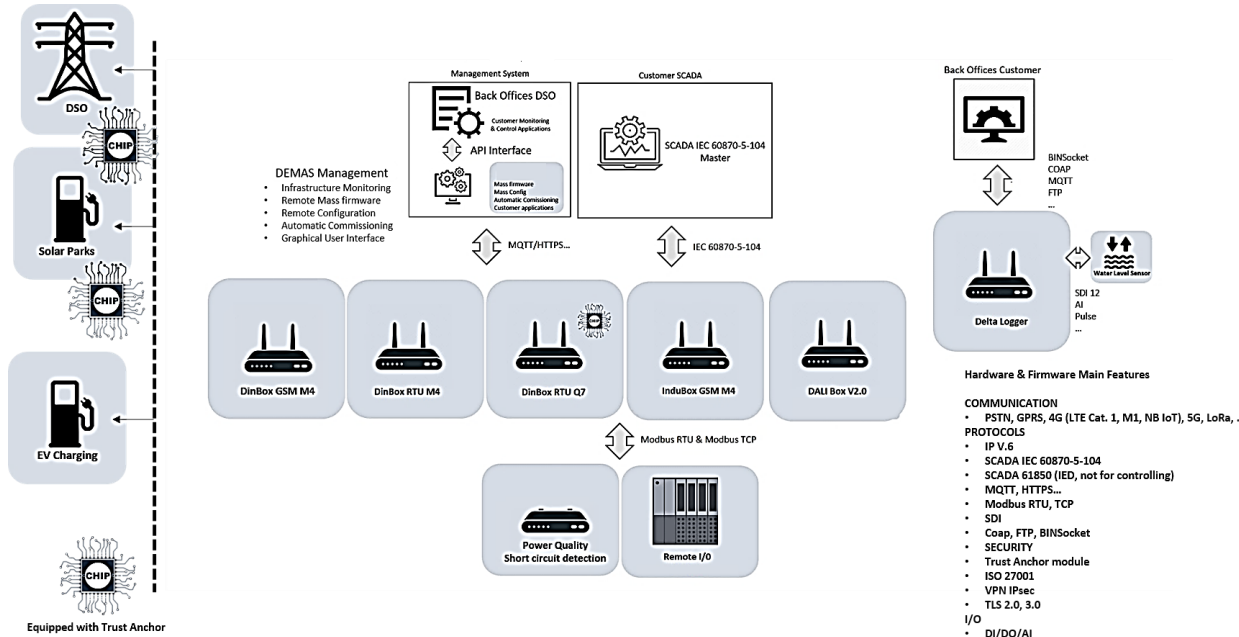
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Datacommunication Specialist for Energy Applications

Bausch Datacom is a Belgian manufacturer (hardware and software) of communication products for the utility sector (electricity, water) and smart electronics for charging stations for electric vehicles since 1987. The company is part of the German Ritter group and cooperates intensely with her sister cooperation Ritter Technologie. On the one hand, the company concentrates on the development of data communication products - via PSTN, GSM, GPRS, 4G (LTE, NB-IoT2), 5G, LoRa, RF 169 MHz - such as modems, Remote Terminal Units, data loggers, and on the other hand on electronics (RTU) for charging stations

ISO 27001 NIS2 Engineering

Bausch Datacom and partner RiTtec are one of the first European manufacturers which will bring an Energy Gateway on the market capable of performing Trust Anchoring to label produced energy coming from Solar parks, EV chargers (Vehicle to Grid), Windmills, heat and power coupling meters. All software and hardware is designed and produced out of an ISO 27001 perspective strictly complying NIS2 European guidelines.



RITTER
Starkstromtechnik

BAUSCH
datacom

Datacommunication Solutions for Energy – EV – Solar – Wind – Water
 PSTN - GPRS - 3G - LTE – NB IoT - 5G – LoRa
 'A Company in Motion'
 Product Overview



InduBox GSM M4

LTE Cat.1 / GPRS Modem
The InduBox GSM M4 modem is an industrial 4G modem with GPRS fallback.

Housing & Power
Dimensions: 180 x 108 x 71 mm
85-264 Vac or 9-25 Vdc (optional)
Watchdog reset
Supercap backup

Module & Processor
4G Cat. 1 / GPRS
Cortex-M4 (STM32Fxx)

Protocols
Modbus RTU (Optional firmware)
Modbus TCP (Optional firmware)
IEC 60870-5-104 (optional firmware)
Routing
Transparent Communication

Interfacing
RS-232 full V.24RS
232 3-wire, galvanically isolated
RS-485 2-wire
1x 10/100Mbps/s
1x DI non-active 5 - 25Vdc

Security
Authentication and Data Encryption via TLS (Transport Layer Security)

Management
Local & remote GUI & Telnet commands
DeMas Management

Certifications
Tested and certified by Laborelec & ANPI



DinBox Router 4G

4G Router
The DinBox Router 4G is a LTE FDD,LTE TDD,EVDO,WCDMA,TD-SCDMA,CDMA1X, GPRS/EDGE router/cellular terminal device providing data

Housing & Power
Dimensions:100 x 97 x 25 mm
Power DC 12V/1.5A
ac adaptor included
Metal housing with DINrail brace

Module & Processor
4G Cat. 1 / GPRS

Protocols
TCP/IP, UDP, ICMP, SMTP (optional), HTTP, POP3(optional), OICQ(optional) TELNET, FTP (optional), SNMP, SSHD, etc

Interfacing
Ethernet: 1 x 10/100 Mbps (RJ45), Serial: 1 x RS232 (or RS485/RS422) port, SIM/UIIM: Standard 3V / 1.8V user card

Security
VPN client (PPTP, L2TP, IPSEC and GRE)
VPN server(PPTP, L2TP, IPSEC and GRE)

Management
Local and remote firmware upgrade , import and export configuration file

Certifications
CE



DinBox GSM M4

LTE Cat. 1 / GPRS Modem
The InduBox GSM M4 modem is a pocket DINrail 4G modem with GPRS fallback

Housing & Power
Dimensions: 22.5 x 107.5 x 75 mm
Power supply: 10-40 Vdc
DINrail

Module & Processor
4G Cat. 1 GPRS fallback
Cortex-M4 (STM32Fxx)

Protocols
Modbus RTU Optional firmware)
Modbus TCP (Optional firmware)
IEC 60870-5-104 (optional firmware)
Routing
Transparent Communication

Interfacing
RS-232 full V.24RS
232 3-wire, galvanically isolated
RS-485 2-wire
LAN 10/100Mbps/s
1x DI non-active 5 - 25Vdc

Security
Authentication and Data Encryption via TLS (Transport Layer Security)

Management
Local via HTML GUI
Remote via HTML GUI & Telnet commands
DeMas Management

Certifications
Tested and certified by Laborelec & ANPI



DinBox RTU M4

LTE Cat.1 / GPRS RTU
The DinBox RTU M4 is a cost-effective RTU with built-in wide range AC power supply. The power supply comes with a supercap

Housing & Power
Dimensions: 172 x 35 x 135 mm
DINrail
85-264 V ac or 9-25 Vdc
Watchdog reset
Supercap backup

Module & Processor
4G Cat. 1 GPRS fallback
Cortex-M4 (STM32Fxx)

Protocols
MQTT
Modbus RTU
Modbus TCP
IEC 60870-5-104
Routing
Transparent Communication

Interfacing
RS-232 full V.24RS
232 3-wire, galvanically isolated
RS-485 2-wire
LAN 10/100Mbps/s
1x DI non-active 5 - 25Vdc
8 DI
2 AI
2 DO
I/O extension possible via Modbus

Security
Authentication and Data Encryption via TLS (Transport Layer Security)

Management
Local via HTML GUI
Remote via HTML GUI & Telnet commands
DeMas Management

Certifications
Laborelec & ANPI



DinBox RTU Q7

LTE Cat.1 / GPRS RTU.
State of the Art RTU for SCADA applications (IEC 60870-5-104/Modbus - TCP or RTU - mapping). The DinBox RTU Q7 uses IEC 60...

Housing & Power
Dimensions: 172 x 35 x 135 mm
DINrail
85-264 Vac
9-25Vdc option
Watchdog reset
Supercap backup

Module & Processor
4G Cat. 1 GPRS fallback
SECO

Protocols
MQTT
Modbus RTU
Modbus TCP
IEC IEC 60870-5-104

Interfacing
232 3-wire, galvanically isolated
1 X RS-485 2-wire
2 X 10/100Mbps/s
Internal I/O board

Software
Container based, new applications possible

Security
VPN IPsec
Crypto Anncoring via Secure Element

Management
DeMas Management

Certifications
CE



DEMAS Management tool

Configuration and Upgrade Tool
The DeMas management tool (Data Management Software) is a modular management system designed to be integrated into...

Configuration and Upgrade Tool
The DeMas management tool (Device Management System) is a modular management system designed to be integrated into existing management systems.

The Tool is designed for the M4 and Q7 platform but can also be used for EDGE platforms (Modems or RTU's) of 3rd party manufacturers.

Configuration and management is done using a file-based management concept. Firmwares, containers, and configurations are created using File Upload and Plugin Mechanisms and uploaded to the DeMas.

In addition to the management system, the DeMas system has monitoring functionalities that can be monitored via the open source application Grafana.

Mass grouping & configuration
Mass firmware upgrade
Automatic Commissioning
New applicatons on demand.

Management
DeMas Management

Certifications
CE



Delta Logger DL5 LTE SDI12

ROADMAP SEPTEMBER 2024!
LTE Cat.M/NB IoT/SDI12 Logger
The Delta Logger DL5 is a 3rd generation logging device with 2 analog inputs, one SDI1

Housing:
Spelsberg TG PC 88-6-O (Housing optional)
housing: IP66-67
Dimensions: 76X74 mm with cutouts and holes fit Spelberg TG PC 88-6-O
Power Supply:
2,5 - 5,5 Vdc range battery

Environmental: Operating Temperature: -20°C + 70°C

Interfaces & Connectors:
2x Analog interface: 0 ... 5Vdc/Input
SDI 12 sensor interface: 12V - 100 mA - Max. 4 devices - 20 readings per device
Sensor Power Supply 3.6V / 12V
2x Pulse Counters - dry contact
USB type B port for configuration and programming
BLE (Bluetooth) configuraton (under evaluation)
RS-485 (Modbus implementation possible)
SMA antenna connector
Micro SIM (MFF2 optional)
Communication:
LTE Cat.M1 / NB2
Quad band GPRS

Processor:
Low power microcontroller sleep mode: < 11uA
Dual bank Program flash for firmware upgrades 256KX2
8Mbyte Data Flash
Real Time Clock 3ppm

Remote configurable

Protocols: MQTT, BINsocket, SDI12

Certification CE



Delta Logger DL2 LoRa SDI12

LoRa / SDI 12 Logger
The Delta LoRa Logger is a logging device with 2 analog inputs, one SDI12 and one counter interface. The device is battery ...

Housing
Dimensions: 72 X 72 mm

Power Supply:
3.3 – 3.6 Vdc battery
Onboard Supercapacitor
housing: IP66-67

Module & Processor
LoRa modulation
Low power microcontroller sleep mode: < 11uA
Dual bank Program flash for firmware upgrades 256KX2
8Mbyte Data Flash
Real Time Clock 3ppm
Remote configurable and programmable

Interfaces & Connectors
2x Analog interface: 16 bit
ADC/Input range:-0,2 .. 5Vdc/Input Impedance > 2,5 mOhm
SDI 12 sensor interface: Max. 4 devices - 20 readings per device
Micro USB 2 port for configuration and programming
SMA antenna connector
eSIM or traditional nano card
Management Local & Remote

Environmental:
Operating Temperature: -10°C + 50°C

Certifications
CE