

Smart Modem Communication for the Industry and Energy market

DinBox LoRa Gateway

Industrial LoRa/3G Gateway

Approved by Bausch Datacom !

LoRa/3G Gateway

is a wireless data gateway based on LoRa protocol. The gateway can be connected to LoRa terminals in various application modes, and send the data to (cloud) servers through GPRS/3G/4G or wired ethernet. The product uses a high-performance industrial-grade 32-bits CPU and wireless module, with an embedded real-time operating system. It provides 1 LAN, 1 WAN/LAN, 1 WIFI interface, supports WIFI wireless configuration, management and OTA update and supports DC input.



Product Highlights

- Ethernet interface
- RS232/RS485/RS422 interface
- 2.5G/3G/4G
- VPN Ipsec
- LoRa

Typical Applications

- Smart grid power line online monitoring
- Smart parking solution
- Soil temperature and humidity monitoring
- Intelligent Agriculture
- Wireless remote meter reading
- Photovoltaic array monitoring

BAUSCH DATACOM

Bausch Datacom NV/SA Tel.: Int 32(0)16 46 12 88 <http://www.bausch.eu>
Tiensesteenweg 54/56 Fax: Int 32(0)16 46 31 51 <http://www.bauschdatacom.be>
B-3360 Korbeek-Lo Belgium E-mail: info@bausch.be



DinBox LoRa Gateway specifications

The DinBox LoRa Gateway is a versatile device, functioning as a gateway, collecting data through LoRa RF, RS-485, Ethernet and sending it To the back-office through GPRS and 3G or LTE. The gateway can set up secured communication using VPN Ipsec.

Housing

- Shell IP30
- Dimensions 157x97x25 mm
- Weight 440g

Power Supply

- 12V/0.5A
- Range: DC: 5~36V

Power Consumption

- Stand By: 4G: 156~170mA@12V 3G: 162~201mA@12V 2G: 134~193mA@12V
- Communication 4G: 310~494mA@12V 3G: 294~412mA@12V 2G: 174~201mA@12V

Processor Engine

- CPU: Industrial 32bits CPU
- FLASH: 16MB (Extend able to 64MB)
- DDR2: 128MB

WiFi Engine

- Standard IEEE802.11b/g/n
- Band Width: IEEE802.11b/g: speed rate up to 54Mbps
- IEEE802.11n: speed rate up to 150Mbps
- Security: Support WEP/WPA/WPA2 encryption types
- Output Power: 20dBm(11n), 24dBm(11g), 26dBm(11b)
- Sensitivity: -72dBm@54Mbps

Certification

- CE
- FCC

Environmental

- Operating Temperature: -35~+75°C (-31~+167°F)
- Storage Temperature: -40~+85°C (-40~+185°F)
- Relative Humidity: 95% (non-condensing)

3G Engine

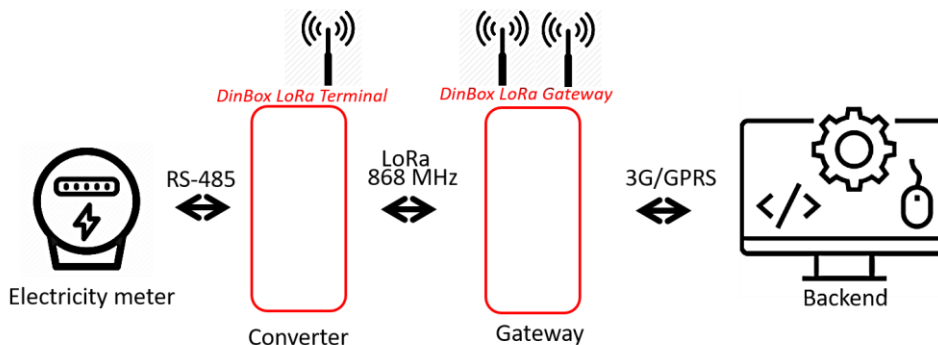
- Standard & Band: DC-HSPA+/HSPA+/HSDPA/HSUPA/UMTS 850/1900/2100MHz tri-band, 850/900/1900/2100MHz quad-band (optional)
- Support GSM 850/900/1800/1900MHz quad-band
- Support GPRS/EDGE CLASS 12
- Band Width: DC-HSPA+: downlink rate 42Mbps, uplink rate 5.76Mbps
- HSPA+: downlink rate 21Mbps, uplink rate 5.76Mbps
- HSDPA: downlink rate 7.2Mbps, HSUPA: uplink rate 5.76Mbps
- UMTS: 384Kbps
- Output Power: < 24dBm
- Receive Sensitivity: < -109dBm

LoRa Engine

- Bands: 433/470/780/868/915MHz
- Urban Communication Distance: 2km
- Output Power: <30dBm
- Receive Sensitivity: <-140dBm
- Speed Rate: 6 level adjustable (0.3, 0.6, 1.0, 1.8, 3.1, 5.5Kbps)

Interface & Connectors

- WAN/LAN: 1*10/100 Mbps WAN/LAN
- LAN: 1*10/100 Mbps LAN
- Serial Port: 1*RS232(or RS485/RS422)
- Indicators: "WAN/LAN", "LAN", "System", "WIFI", "Online", "Lora", "Power"
- Antenna: Cellular: 1* standard SMA female antenna, 50 ohm, lightning protection (optional)
- LoRa: 1* standard SMA female antenna, 50 ohm, lightning protection (optional)
- Wifi: 1* standard SMA male antenna, 50 ohm, lightning protection (optional)
- SIM/UIIM: 1.8/3.3V SIM/UIIM



BAUSCH DATACOM

Bausch Datacom NV/SA Tel.: Int 32(0)16 46 12 88 <http://www.bausch.eu>
Tiensesteenweg 54/56 Fax: Int 32(0)16 46 31 51 <http://www.bauschdatacom.be>
B-3360 Korbeek-Lo Belgium E-mail: info@bausch.be

