

SPECIFICATIONS:

COMMANDER

— MULTI-PROTOCOL GATEWAY —

Delivery package

- Commander/Commander GSM gateway
- Wall power supply: 5 V
- SIM card optional



General

The Commander GSM captures radio protocols for up to 1,000 meters* and forwards these via Wi-Fi, ethernet, or mobile network (GSM) to our MGM platform or a designated customer server. One or more repeaters can be attached to the Commander, increasing the number of meters from which data can be received.

To ensure secure transmission, all data remains encrypted for the entirety of its transport, only decrypted once it reaches its final destination: the target system.

Gateways are administered through our Meter Gateway Management (MGM) web application. Through MGM, devices can be configured entirely remotely. This makes installation in the field much easier.

The Commander's integrated data logger temporarily saves encrypted data for max. 4 hours, preventing data loss in case of power loss or mobile network disruption.

Gateways consume roughly 13 kWh of electricity per year at full functionality and also support the Smart Meter Language (SML) via radio protocol, in addition to wireless M-Bus and OMS.

The Commander's hardware comes ready to support the control and operation of smart home devices; future software versions will enable this functionality.

*Depending on the meters' transmission interval: The limiting factor being the transmission power of the individual meters as well as their distance from the respective gateway.

Gateway software client

The Commander series is outfitted with gateway client software, which serves as the device's control center and administers data transport.

Technical specifications

Dimensions	102 x 102 x 28 mm
Weight	135 g net, 238 g brutto
Power supply	5 V
Operating temperature range	0 to +50 °C
Protection class	IP 20
Installation type	Wall or table

Network specifications

Network port	Ethernet
ZigBee	Frequency: 2.4 GHz Transmission power: -101 dBm, output: +8 dBm
OMS/wireless M-Bus	Frequency: 868 MHz Transmission power: -101 dBm, output: +12 dBm
Z-Wave	Frequency: 868 MHz Transmission power: -103 dBm, output: +4 dBm
Wi-Fi (b/g/n)	Frequency: 2.4 MHz Transmission power: -101 dBm, output: +18 dBm
GSM (optional)	UBLOX Sara U270 Frequency: GSM 900/1800 MHz, UMTS 900/2100 MHz Transmission power: -110 dBm, output: 24-33 dBm
Bluetooth	Protocol: BLE 4.2 Transmission power: -94 dBm; transmission rate: +4 dBm

Standards and norms

Radio infrastructure	EN 300 328 V1.9.1 (2015-02) EN 300 220-1 V3.1.1 EN 301 511 V12.5.1 (2017-03) EN 301 908-1 V11.1.1 (2016-07) EN 301 908-2 V11.1.2 (2017-08)
Security	IEC 60950-1:2005 (second edition) + Am 1:2009 + Am 2:2013 EN 61000-3-2: 2006 +A1: 2009 +A2:2009 EN 61000-3-3: 2008 UL 60065

Electromagnetic compatibility (EMC)	EN 301 489-01 (V1.9.2) EN 301 489-03 (V1.6.1) EN 301 489-07 (V1.3.1) EN 301 489-17 (V2.2.1) EN 301 489-24 (V1.5.1) EN 55022 (2010) EN 55024 (2010)
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Health	EN 62311: 2008
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Models

Item number	Label	Equipment
17911000	COM	Commander Gateway Ports: wM-Bus/OMS, ZigBee, Z-Wave, WLAN
17912000	COM-GSM	Commander GSM Gateway Ports: wM-Bus/OMS, ZigBee, Z-Wave, WLAN, 2G/3G
17913000	COM-REP	Commander Repeater Ports: wM-Bus/OMS, ZigBee, Z-Wave, WLAN