

OPTION

CloudGate

Probe LoRaWAN



The Ultimate Smart Metering companion

- Compact DIN rail mountable metering device.
- Monitor assets like utility meters remotely.
- Read data from devices via the built in Modbus (RTU), M-Bus (Wired), P1 interface, dependent on the Probe variant.
- Control assets via the Digital or Analog Input and up to 2x Digital Output (e.g. relay or actuator).
- LoRa (EU868, US915).

General description

CloudGate Probe is a compact DIN rail mountable metering device that can connect devices over Modbus (RS-485), M-bus, Digital & Analog Inputs to a LoRaWAN network. This permits to monitor assets and buildings remotely in a convenient way.

As a low cost and compact device, the CloudGate Probe can read and transmit data of nearly any meter to any IoT platform. The device can also be used to change settings or the state of an actuator like an HVAC device, control valve, relay, etc.

CloudGate Probe is configurable via:

- LoRaWAN downlinks
- USB interface

The CloudGate Probe LoRa is intended to be used in building use cases (i.e. smart building and building management platforms).

Use case: Smart Building

CloudGate Probe can be used as an aggregator that can receive and transmit data from, and to, a master device in a building. Reading multiple meters, via interfaces like Modbus, M-bus or pulse counters, controlling HVAC actuators like heat pumps, ventilation and heating systems and to a limited and safe extent adjusting parameters like temperature, ventilation power, lights, shading, etc.

Use case: Assets monitoring

CloudGate Probe can be built into HVAC assets to allow efficient pro-active maintenance. It also enables a service engineer to know what the situation is like before going on-site. This way service interventions can be scheduled more efficiently.

Order info:

PN	Description
CP2010_12268	Modbus + GPIO's
CP2010_12271	M-bus + GPIO's
CP2010_12272	P1 + GPIO's

Technical Specifications		
Mechanical information	Formfactor / Mounting	DIN-rail mountable device 2 U wide
	Material	PC/ABS
	Weight	74 g
Power supply	DC-powered	6-32V
	Max. power consumption	4W
Technical information	LoRa client	• 868 MHz or 915 MHz regions • External antenna (SMA-RP) • LoRaWAN protocol 1.0.3 • LoRaWAN class C
	M-Bus mini-master	• 34V bus power • up to 4 Unit Loads • Screw terminal connection
	Modbus interface	• RS485 • Half duplex • Screw terminal connection
	P1 interface	• 3 pins • Optional RJ11 adapter
	Analog input	• Configurable • 0-3.3V input conversion • 0-10V input conversion • 4-20mA input conversion • Dry contact digital input
	Digital input	• Configurable • CMOS input 0-3.3V • Dry contact input
	Digital outputs*	• Configurable • CMOS output 0-3.3V • Open Drain output (<250mA)
	5V	• Can be used as 5V power supply for sensors (max. 100 mA) in Modbus & M-bus variants • Can be used as 5V power supply for CloudGate Probe in P1 variant
	Last-Gasp backup power	Offering >10s operation following power-outage.
	USB C port	✓
Environmental information	Operating temperature	-20°C to 60°C
	Humidity	5% to 95% relative humidity (noncondensing)
	IP Class	IP20
Certificates		CE Radio Equipment Directive (RED) 2014/53/EU, RoHS/REACH, WEEE

* 1 output in case of P1-variant, 2 outputs in case of Modbus or M-Bus variant.