OPTION

CloudGate

ETHERNET IO

NEW

Industrial grade cost-efficient alternative to PLC's

- Offers a wide variety of wired interfaces with pre-installed versatile IO card
- Ethernet connectivity with optional WiFi and LoRaWAN (in rear expansion slot)
- Easy graphical programming with LuvitRED application

OPTION

CloudGate Ethernet IO was designed with the following use cases in mind:

- Connect devices such as card readers over the serial interface (RS232)
- Connect devices such as sensors or electricity meters over the Modbus interface (RS485)
- Connecting to the high-speed CAN bus of vehicles or industrial equipment
- Connecting sensors over the I2C bus interface
- Use the 3 configurable GPIO to read analog/digital inputs or control digital outputs
- Use the optional WiFi expansion card to connect the CloudGate to your WiFi access point or setup the CloudGate as a WiFi access point
- Use the optional LoRaWAN expansion card to configure the CloudGate as LoRaWAN forwarder or as private LoRaWAN server
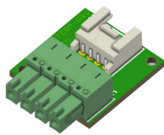
Secure remote access

Use the CloudGate to provide remote access over a secure VPN tunnel to the Ethernet device(s) connected to its LAN Ethernet port.

CloudGate IoT gateway

CloudGate IoT gateways were designed with our signature features including: ruggedized design housing, industrial grade temperate ranges, timed wake-up and ignition sensing. All gateways are LuvitRED enabled.

Use the CloudGate with a range of **I2C peripherals** from our partner BiPOM (www.bipom.com)

Grove Converter

BPN-I2C-1W
(1-wire interface)

BPN-I2C-TH
(Humidity & Temperature sensor)

BPN-I2C-RTC
(Real-Time Clock)

BPN-I2C-CC
(Crypto chip and EEPROM)

Technical Specifications		
CPU		i.MX280 (ARM926EJ-S @ 450 MHz) Memory available for customer apps 256 MB Flash (20 MB for data, 30 MB for application, 0 MB extra data partition)
Ethernet (IEEE 802.3)	10/100Mb/s RJ45 Connector	✔
Power control	Timed Wakeup	✔
	Ignition Sensing	✔
Power input	9-33V DC	• DC input voltage: 9-33 V DC • Connector: Micro-Fit 3.0TM, Dual row, 4-position
Rear Expansion card	Optional	WLAN or LoRa expansion card

Front Expansion card	Fixed	• Serial interface supporting RS232 or RS485 Half/full duplex
		• CAN interface up to 1Mbps
		• I2C bus interface with 3.3V output to power the sensor
		• 3 configurable IO interfaces, supporting following IO modes:
		  • Digital In 0-30V : float / pull up / pull down
		  • Digital Out : push pull (0-3.3V) / open drain (<250mA, 0-30V)
		  • Pulse count (S0) : Input 0-30V, max frequency 1kHz
		  • Analog In 0-3.3V
		  • Current loop in (4-20mA)
		Each pin can be configured as one of the above. All pins are accompanied by a GND pin, and an extra pair of V-Out and GND is available on the connector.

Aluminium Case	Dimensions	115 × 106 × 45 mm 4.52 × 4.17 × 1.77 in
	Weight	285 g / 10.05 oz
	Mounting, Bulkhead	Bulkhead with 6xM4 holes or DINrail with optional adapter
	Status LED	L: WLAN state, WLAN signal strength (if optional WLAN card installed) R: system status, WWAN state, WWAN signal strength
Environ-mentals	Operating temperature	-30°C to +70°C/ -22°F to to 158°F
	Storage temperature	-40°C to +85°C / -40°F to to 185°F
	Humidity	5% - 95%
Certifications		CE, FCC, ISED
Std. compliance	ROHS, Reach, WEEE	✔
CloudGate Universe	Device can be configured OTA using CloudGate Universe	✔
For developers	CloudGate development kit: developer board, breadboard, SDK, HDK	✔
IO card Connectors	Würth Elektronic 361	Phoenix Contact Pluggable Terminla Block Pitch 3.81 mm

Product	PN
CloudGate Ethernet IO	CG0102-12204