# CloudGate micro

LTE CAT4

**AVAILABLE WITH OPTIONAL WIFI, LORGWAN or BATTERY** 





# Cost-efficient & effective world-wide LTE connectivity

- Worldwide LTE Cat 4 Programmable Multicarrier Gateway with 3G fallback
- Industrial and building automation protocol converter
- Secure Remote Access
- Connectivity back-up
- Optional WiFi or LoRaWAN or Battery backup

## **OPTION**

### Smart bit pipe

It serves as a smart bit pipe to the internet and easily connects any device to the Cloud via its Ethernet ports.

### Connectivity back-up

It ensures connectivity back-up. Connect its WAN port to an ADSL or cable modem and its LAN port to the router. When the WAN port loses connection, its LTE modem will take over so internet access is always secured.

### Secure remote access

CloudGate micro provides remote access over a secure VPN tunnel to the Ethernet device(s) connected to its LAN Ethernet ports.

### CloudGate 4.0 next generation

CloudGate 4.0 IoT gateways were designed with CloudGate's signature features; including ruggedized design housing, industrial grade temperature ranges, timed wake-up and ignition sensing, sim connection, passive and active GPS antenna support and all are LuvitRED enabled.

NEW! CloudGate 4.0 next generation IoT gateways now feature world-wide connectivity, optional Li-ion battery, and micro-SD holder

### CloudGate micro ex-factory options

CloudGate micro has a board-to-board connector on its main board that can be used to mount one of these optional expansion cards:

- Battery plug-on card
- LoRaWAN plug-on card
- WLAN plug-on card

These plug-on cards are installed during production\*.

| Feature             | Sub Feature                  | Description                                                                                                                                                  |
|---------------------|------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
| WWAN Modem LTE      | Supported frequency bands    | LTE FDD: B1, B2, B3, B4, B5, B7, B8, B12, B13, B18, B19, B20, B26, B28     TDD: 38/39/40/41                                                                  |
|                     | Max. Connectivity speeds     | LTE DL 150 Mbps, UL50 Mbps                                                                                                                                   |
| WWAN Modem<br>3G/2G | Supported frequency bands    | • UMTS/HSDPA/HSUPA/HSPA+: 800-850/900/AWS (1700/2100)/1800/1900/2100 MHz (B1, B2, B4, B5, B6, B8, B19)                                                       |
|                     | Max. Connectivity speeds     | DC-HSPA+ DL 42 Mbps, UL 5,76 Mbps                                                                                                                            |
|                     | RX Diversity                 | Simultaneous Equalization and Rx Diversity on all bands                                                                                                      |
| WWAN antenna        | Antenna connector            | 1 × SMA: WWAN Main     1 × SMA: WWAN Mimo/Div/GPS                                                                                                            |
| SIM                 | Туре                         | USIM/SIM, class B and class C                                                                                                                                |
|                     | Dimension                    | microSIM (3FF)                                                                                                                                               |
|                     | Location                     | Behind back cover plate                                                                                                                                      |
| 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)    |
| GPS                 |                              | Standalone GPS, Assisted GPS, GPS OneXTRA <sup>TM</sup> Wideband GPS processing (20MHz) for improved measurement accuracy Passive/active GPS antenna support |
| Ethernet interface  | Speed                        | • 10/100Mbps (IEEE 802.3)                                                                                                                                    |
|                     | Connector                    | 2x RJ45, SW selectable as LAN or WAN                                                                                                                         |
| LED                 | 3 multi-color                | System     WWAN state     WWAN signal                                                                                                                        |
| MicroSD card holder | Available                    | On main PCB                                                                                                                                                  |
|                     | Location                     | Behind back cover plate                                                                                                                                      |
| WLAN(*)             | Optional                     | 802.15.4 b/g/n. 2.4GHz or 5GHz. Client or access point mode     Max 32 clients can be connected                                                              |
|                     | Connector                    | 1x RP-SMA (back-side)                                                                                                                                        |
| LoRaWAN(*)          | Optional                     | software-configurable as 8xxMHz or 9xxMHz                                                                                                                    |
|                     | Connector                    | 1x RP-SMA (back-side)                                                                                                                                        |
| Battery (*)         | Optional                     | Li-ion battery for last-gasp function (up to 1h)     Capacity 980mAh                                                                                         |
| Power control       | Available                    | Timed wakeup. Ignition sensing (with extra 3rd pin on DC power connector)                                                                                    |
| Programming         | Available                    | LuvitRED (graphical drag & drop) or SDK (C code)                                                                                                             |
| Aluminum case       | Dimension                    | • 102 x 97 x 26 mm<br>• 4 x 3.8 x 1 in                                                                                                                       |
|                     | Weight                       | • 220 g/7.7 oz (excl. optional cards)                                                                                                                        |
|                     | Front/back plate<br>mounting | 5x Torx T10 front, 5x Torx T10 back                                                                                                                          |
|                     | CloudGate mounting           | Bulkhead: 2x4mm front, 2x4mm back     DIN rail: with optional adapter                                                                                        |
| Environmental       | Operating tem-<br>perature   | • -30°C to 70°C (-22°F to 158°F)                                                                                                                             |
|                     | Storage temperature          | • -40°C to 85°C (-40°F to 185°F)                                                                                                                             |
| Certification       |                              | CE, FCC, PTCRB, ISED, AT&T, Verizon, US Cellular, Telus                                                                                                      |
| Compliance          |                              | Rohs, Reach, Weee                                                                                                                                            |
| Accessories         |                              | LTE antennas AC power supply or DC power cable Din rail mount Battery (not for versions with WLAN card or LoRaWAN card)                                      |



(\*) Order numbers differ per model

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|----------------------|--------------------------------------------------------------------|--------------|--|--|
|                      | Product                                                            | PN           |  |  |
|                      | CloudGate micro                                                    | CM0125-12164 |  |  |
|                      | CloudGate micro with battery (LORaWAN & WLAN not possible)         | CM0125-12196 |  |  |
|                      | CloudGate micro with LoRaWAN (battery back-up & WLAN not possible) | CM0125-12199 |  |  |
|                      | CloudGate micro with WLAN (battery back-up & LoRaWAN not possible) | CM0125-12166 |  |  |