

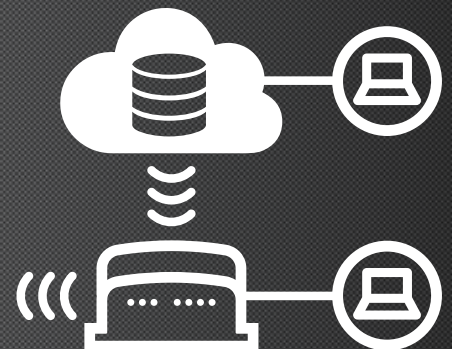


# CloudGate



## CONNECTING THINGS to the Cloud

- Simple, value priced WWAN M2M IP connectivity
- Automatic connection monitoring and error recovery
- Secure, redundant firmware and configuration images
- Unique software and hardware configuration flexibility
- Automatic provisioning of custom middleware



## Simple, value priced WWAN M2M IP connectivity

The CloudGate provides competitively priced LAN to WWAN routing and GPS functionality in a single basic unit. The CloudGate is simple to configure locally or remotely from your PC, tablet or SmartPhone.

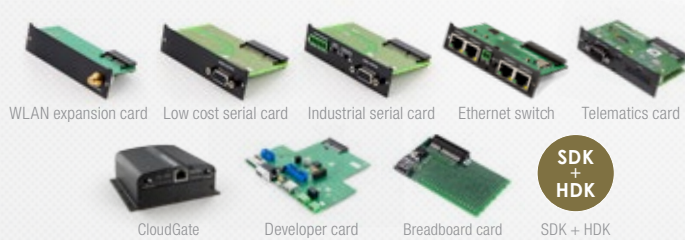
## Reliable and secure

CloudGate automatically resolves common problems associated with wireless M2M connectivity. Built in software and hardware watchdogs continuously monitor each component of the product and the product's connectivity to home servers. In the event an issue is detected, the product proactively takes steps to re-establish connectivity. All software and configuration images are protected with digital signatures and have dual rollback images that allow the product to revert to previous working settings if an issue is detected. All management functions are protected by certificate and/or password based security mechanisms and all management actions take place over hardware assisted encrypted links.

## Flexible and cost effective to integrate and deploy

CloudGate provides unique flexibility that allows customers and system integrators to tailor the product to their solution or even site specific requirements. CloudGate incorporates two hardware expansion slots that allow the CloudGate to be enhanced with additional radio and/or wired interfaces. The expansion cards are simple and quick to install, allowing the field upgrade of the device when new functionality is required. All the design details of the expansion card are available to partners allowing you to add value with your own hardware products. CloudGate allows simple integration and provisioning of customer or third party middleware and applications. The automated cloud provisioning system means that each device can be set with its own custom configuration and image that is automatically loaded from the cloud when it initially connects to the internet.

## Also available



As part of the continual product improvement process, OPTION reserves the right to alter the specifications of this product.  
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Option nv - Gaston Geenslaan 14 - 3001 Leuven Belgium  
T +32 16 317 411 - F +32 16 207 164 - www.option.com



Features	Sub Feature	Description
WWAN Modem	Supported frequency bands	<ul style="list-style-type: none"> <li>GSM/GPRS/EDGE: 850/900/1800/1900 MHz</li> <li>UMTS/HSDPA/HSUPA/HSPA+: 800-850/900/1900/2100 MHz (B1, B2, B5, B6, B8)</li> </ul>
	Max. Connectivity speeds	<ul style="list-style-type: none"> <li>HSPA+: 14.4 Mbps (Cat 10) down 5.76 (Cat 6) up</li> <li>HSPA+ Rel 7 SW features CPC (DTX/DRX), HS-SCCH-less operation, Enhanced CELL_FACH, Enhanced L2, EF-DPCH</li> </ul>
	Rx Diversity	<ul style="list-style-type: none"> <li>Simultaneous Equalization and Rx Diversity on all bands, except for GSM/GPRS/EDGE</li> </ul>
	Antenna connector	<ul style="list-style-type: none"> <li>1 x SMA: WWAN Main</li> <li>1 x SMA: WWAN Div/GPS</li> </ul>
	Visual feedback	<ul style="list-style-type: none"> <li>Seven 3 color LEDs showing system status and signal strength</li> </ul>
GPS	Assisted/Standalone GPS	<ul style="list-style-type: none"> <li>Standalone GPS, Assisted GPS</li> <li>Wideband GPS processing (20MHz) for improved measurement accuracy</li> </ul>
	CPU	<ul style="list-style-type: none"> <li>ARM926EJ-S @ 450MHz</li> <li>Memory available for customer applications:                             <ul style="list-style-type: none"> <li>- 30 Mb R/O flash for executables</li> <li>- 30 Mb R/W flash shared with system</li> <li>- 40 Mb free RAM</li> <li>- 1 Mb Configuration data</li> </ul> </li> </ul>
Ethernet (IEEE 802.3)		<ul style="list-style-type: none"> <li>10/100 Mbps RJ45 Connector</li> </ul>
SIM	USIM/SIM connection	<ul style="list-style-type: none"> <li>USIM/SIM connection – Class B and Class C</li> </ul>
Expansion Slot 1 & 2		<ul style="list-style-type: none"> <li>Expansion board for IO functions such as serial, USB, GPIO, WLAN</li> </ul>
	Power	DC Power in
	Connector type	<ul style="list-style-type: none"> <li>Micro-Fit 3.0™, Dual Row, 4 Circuits</li> </ul>
	Current consumption	<ul style="list-style-type: none"> <li>All measurements at 12V DC</li> <li>CloudGate attached to 2G network, no Ethernet: 121mA.</li> <li>CloudGate attached to 2G network, Ethernet connected: 136mA</li> <li>CloudGate attached to 2G network, no Ethernet, 2G call (2Tx, 32dBm): 270mA, peak = 772mA</li> <li>CloudGate attached to 3G network, no Ethernet, 3G call @ 2100MHz (band 1): 341mA</li> </ul>
Case	Dimensions (w x d x h)	<ul style="list-style-type: none"> <li>115 mm × 105 mm × 45 mm</li> </ul>
	Weight	<ul style="list-style-type: none"> <li>294 g</li> </ul>
	Mounting	<ul style="list-style-type: none"> <li>6 through holes for M4 bolts - 2 x 2 compatible with VESA Mount MIS-D 75 (Optional standard DIN rail mounting interface)</li> </ul>
Environmentals	Operating temperature	<ul style="list-style-type: none"> <li>-30°C to 70°C</li> </ul>
	Storage temperature	<ul style="list-style-type: none"> <li>-40°C to +85°C</li> </ul>
	Humidity operational	<ul style="list-style-type: none"> <li>5% - 95% non condensing</li> </ul>
Certification		<ul style="list-style-type: none"> <li>JATE, Telecom, Softbank, NTT docomo</li> </ul>
Standards compliance		<ul style="list-style-type: none"> <li>ROHS, Reach</li> </ul>

1. Define start-up configuration on CloudGate provisioning server



2. Configuration and any custom middleware are automatically installed



3. Device is ready to connect things to the Cloud!

