## imall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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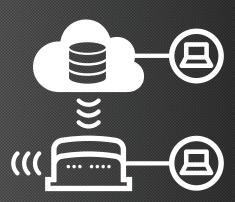


# CloudGate

THERNET



- 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



## CloudGate

#### CONNECTING THINGS to the Cloud

#### Simple, value priced WWAN M2M IP connectivity

The CloudGate provides competitively priced LAN to WWAN routing and GPS functionality in a single basic unit certified on all major US cellular operators. 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



		SD + HD	
Developer card	Breadboard card	SDK +	
	Developer card	Developer card Breadboard card	

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#### 1. Configure CloudGate provisioning server



#### 2. Configuration & middleware are automatically installed

HDK



Features	Sub Feature	Description
WWAN Modem	Supported frequency bands	<ul> <li>GSM/GPRS/EDGE: 850/900/1800/1900 MHz</li> <li>UMTS/HSDPA/HSUPA/HSPA+: 800-850/900/1900/2100 MHz and AWS band (1700/2100 MHz) (B1, B2, B4, B5, B6, B8)</li> <li>CDMA 1xRTT/EV-D0 rev0/EV-D0 revA: 800/1900 (BC0, BC1)</li> </ul>
	Max. Connectivity speeds	<ul> <li>HSPA+: 14.4 Mbps (Cat 10) down 5.76 (Cat 6) up</li> <li>EV-DO RevA mode: 3.1 Mbps FL/1.8 Mbps RL</li> </ul>
	Rx Diversity	Simultaneous Equalization and Rx Diversity on all bands, except for GSM/GPRS/EDGE
	Connectors	<ul><li>1 x SMA: WWAN Main</li><li>1 x SMA: WWAN Div/GPS</li></ul>
	Visual feedback	Seven 3 color LEDs showing system status and signal strength
GPS	Assisted/Standalone GPS	<ul> <li>Standalone GPS, Assisted GPS, gps OneXTRA™</li> <li>Wideband GPS processing (20MHz) for improved measurement accuracy</li> </ul>
CPU		<ul> <li>ARM926EJ-S @ 450MHz</li> <li>Memory available for customer applications: <ul> <li>-30 Mb R/0 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)		• 10/100 Mbps RJ45 Connector
SIM	USIM/SIM connection	USIM/SIM connection – Class B and Class C
Expansion Slot 1 & 2		<ul> <li>Expansion board for IO functions such as serial, USB, GPIO, WiFi</li> </ul>
Power	DC Power in	• 9-33 V DC
	Connector type	Micro-Fit 3.0 <sup>™</sup> , Dual Row, 4 Circuits
	Current consumption	<ul> <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 I): 341mA</li> </ul>
Case	Dimensions (w x d x h)	• 115 mm × 105 mm × 45 mm
	Weight	• 294 g
	Mounting	6 through holes for M4 bolts - 2 x 2 compatible with VESA Mount MIS-D 75 (Optional standard DIN rail mounting interface)
Enviromentals	Operating temperature	<ul> <li>-30°C to 70°C</li> </ul>
	Storage temperature	• -40°C to +85°C
	Humidity operational	• 5% - 95% non condensing
Certification		• FCC • IC • PTCRB • IFETEL
Standards compliance		• ROHS, Reach





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

