

M100 Series



Compact & intelligent industrial modem

The M100 is the perfect solution for M2M applications facing tough environmental conditions and extended lifetime requirements. This compact and intelligent modem running Open AT® Application Framework supports specific protocols and accessories specifically developed by Maestro to ease integration with industrial equipment such as electricity meters, programmable logic controllers, lifts and vending machines. The M100 is fully type approved in 2G, CDMA or 3G and ready for global deployment.

M100 Series

M100 2G

GPRS / EDGE:

- ✓ RS-232
- ✓ Digital input / output x 1
- ✓ Analogue input x 1
- ✓ Gold cap. backed-up RTC

M100 CDMA^{plus}

Verizon Wireless CDMA2000 1X:

- ✓ RS-232
- ✓ Digital input x 2
- ✓ gpsOne
- ✓ USB 2.0

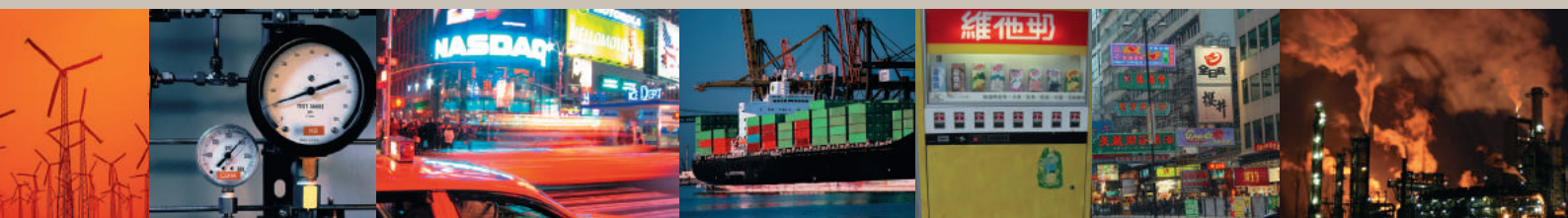
M100 3G XT

Dual or tri-band HSDPA:

- ✓ RS-232
- ✓ Digital input / output x 2
- ✓ gpsOneXTRA™
- ✓ USB 2.0

Easy configuration

The Maestro Smart Pack II is pre-loaded in all M100 modems to ease device setup and network registration. This application includes much-needed features for system integrators such as auto baud-rate detection, auto-TCP/UDP connection, self-healing in case of network failure, industry specific protocols and many more.



Technical specifications

FEATURES	M100 2G	M100 CDMA ^{plus}	M100 3G XT
CELLULAR TECHNOLOGY			
GSM / GPRS / EDGE	Quadband / class 10 / class 10		Quadband / class 10 / class 12
CDMA2000 1X		✓	
W-CDMA / HSDPA			Up to 3.6Mbps downlink
Voice / Data / Fax / SMS	✓		✓
Internet services	TCP / UDP / FTP / HTTP / SMTP / POP3 / SNMP / SSL		
LOCATION TECHNOLOGY			
GPS (NMEA port and command)		Standalone, gpsOne™	Standalone, gpsOneXTRA™, A-GPS
GPS Specifications		gpsOne™	A-GPS
Cold start sensitivity / TTFF		-145 dBm / 39 s	-153 dBm / < 5 s
Hot start sensitivity / TTFF		-158 dBm / 9 s	-153 dBm / < 3 s
Tracking sensitivity		-160 dBm	-155 dBm
Accuracy in open sky		< 3 m	< 2 m
FUNCTIONAL FEATURES			
AT command set	> 300		
Sierra Wireless Open AT® Application Framework	✓		
Maestro Wireless Solutions Smart Pack II	Auto baud-rate detection, auto-TCP/UDP, self-healing protocol, DynDNS, etc.		
Download Over The Air	✓		
Autorestore - timer reset	✓		
OTHER FEATURES			
Operating status LED	✓		
Casing	Aluminium alloy		
DIN rail mountable	✓		
INTERFACES			
SIM	1.8V / 3.0V		1.8V / 3.0V
RS-232C on 15-pin sub-D connector	✓		
USB 2.0 on mini-B female connector (slave only)		✓	
Micro-Fit™ 4-pin connector	Power supply (on 2 pins)		
	1 x digital input / output (on 1 pin)	1 x digital input (on 1 pin)	2 x digital input / output (on 2 pins)
	1 x analogue input (on 1 pin)	1 x digital input (on 1 pin)	
SMA antenna connector (50 Ω)	1 x cellular	1 x cellular and 1 x GPS (passive and active)	1 x cellular and 1 x GPS (passive and active)
DIMENSIONS			
Size without connectors	62.8 x 60 x 21.8mm		
Weight	90g		
TEMPERATURE RANGE			
Operating	-30°C ~ +70°C		
POWER SUPPLY			
Input voltage	5VDC ~ 32VDC in		

ORDERING INFORMATION	M1002G	M100CDMAPLUS-V	M1003GXT00	M1003GXT02	M1003GXT04
Frequency bands (MHz)	850/900/1800/1900	800/1900	850/1900	900/2100	800/850/2100
REGULATORY					
CE	✓			✓	✓
FCC		✓	✓		
PTCRB			✓		
A-Tick				✓	✓
CARRIER					
AT&T / Rogers Wireless			✓		
Verizon Wireless		✓			
Telstra					✓
YES Optus				✓	
NTT Docomo					✓

