

# M100<sup>485</sup> Series



## Compact & intelligent industrial modem

The M100<sup>485</sup> is the perfect solution for M2M applications facing tough environmental conditions and extended lifetime requirements. This compact and intelligent modem running Open AT<sup>®</sup> 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 alarm systems. The M100<sup>485</sup> is fully type approved in CDMA or 3G and ready for global deployment.

# M100<sup>485</sup> Series

### Common features

- ✓ Half-duplex RS-485
- ✓ Modbus RTU master
- ✓ Modbus RTU to TCP gateway
- ✓ USB 2.0
- ✓ Data-logging with export to FTP

### M100 CDMA<sup>485</sup>

Verizon Wireless CDMA2000 1X:

- ✓ Digital input x 2
- ✓ gpsOne

### M100 3G<sup>485</sup>

Dual or tri-band HSDPA:

- ✓ Digital input / output x 2
- ✓ gpsOneXTRA<sup>™</sup>

### 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 protocol and many more.



## Technical specifications

FEATURES	M100 CDMA <sup>485</sup>	M100 3G <sup>485</sup>
<b>CELLULAR TECHNOLOGY</b>		
GSM / GPRS / EDGE		Quadband / class 10 / class 12
CDMA2000 1X	✓	
W-CDMA / HSDPA		Up to 3.6Mbps downlink
SMS	✓	✓
Internet services	TCP / UDP / FTP / HTTP / SMTP / POP3 / SNMP / SSL	
<b>LOCATION TECHNOLOGY</b>		
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
<b>FUNCTIONAL FEATURES</b>		
Modbus RTU to TCP gateway		✓
Modbus register store and forward	Data-logging feature with CSV export to FTP	
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		✓
<b>OTHER FEATURES</b>		
Operating status LED		✓
Casing	Aluminium alloy	
DIN rail mountable		✓
<b>INTERFACES</b>		
SIM		1.8 / 3.0 V
RS-485 half-duplex on 3-pin COMBICON 5 mm		✓
ESD protection - contact		4 kV
ESD protection air discharge		8 kV
USB 2.0 on mini-B female connector (slave only)		✓
Micro-Fit™ 4-pin connector	Power supply (on 2 pins)	
	2 x digital input (on 2 pins)	2 x digital input / output (on 2 pins)
SMA antenna connector (50 Ω)	1 x cellular and 1 x GPS (passive and active)	1 x cellular and 1 x GPS (passive and active)
<b>DIMENSIONS</b>		
Size without connectors	62.8 x 60 x 21.8mm	
Weight	90g	
<b>TEMPERATURE RANGE</b>		
Operating	-30°C ~ +70°C	
<b>POWER SUPPLY</b>		
Input voltage	5VDC ~ 32VDC in	

ORDERING INFORMATION	M100CDMA485-V	M1003GXT48500	M1003GXT48502	M1003GXT48504
Frequency bands (MHz)	800/1900	850/1900	900/2100	800/850/2100
Regulatory (pending)	FCC	FCC / PTCRB	CE / A-Tick	A-Tick
Carrier	Verizon Wireless	AT&T / Rogers Wireless	Telstra	Telstra / NTT Docomo

