M100
Series

maestro
empowering wireless

Compact & intelligent industrial modem

The M100 [485] 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 alarm systems. The M100 [485] is fully type approved in CDMA or 3G and ready for global deployment.

M100 [485] Series

Common features

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

M100 CDMA [485]

Verizon Wireless CDMA2000 1X:
- ✓ Digital input x 2
- ✓ gpsOne

M100 3G [485]

Dual or tri-band HSDPA:
- ✓ Digital input / output x 2
- ✓ gpsOneXTRA™

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.

FEATURES	M100 CDMA [485]	M100 3G [485]
CELLULAR TECHNOLOGY		
GSM / GPRS / EDGE		Quadband / class 10 / class 12
CDMA2000 1X	✓	
W-CDMA / HSDPA		Up to 3.6 Mbps downlink
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 (dBm) / TTFF (seconds)	-145 / 39	-153 / < 5
Hot start sensitivity (dBm) / TTFF (seconds)	-158 / 9	-153 / < 3
Tracking sensitivity (dBm)	-160	-155
Accuracy in open sky (meters)	< 3	< 2
FUNCTIONAL FEATURES		
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	✓	
OTHER FEATURES		
Operating status LED	✓	
Casing	Aluminium alloy	
DIN rail mountable	✓	
INTERFACES		
SIM		1.8 / 3.0 V
RS-485 half-duplex on 3-pin COMBICON 5 mm	✓	
ESD protection - contact (kV)	4	
ESD protection air discharge (kV)	8	
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)
DIMENSIONS		
Size without connectors (in mm)	62.8 x 60 x 21.8	
Weight (g)	90	
TEMPERATURE RANGE		
Operating (°C)	-40 ~ +85	
POWER SUPPLY		
Input voltage (V DC)	5 to 32	

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