



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 muchneeded features for system
integrators such as auto
baud-rate detection, autoTCP/UDP connection, selfhealing in case of network
failure, industry specific
protocols and many more.













Technical specifications

| CELLUAR TECHNOLOGY Quadband / class 10 / class 10 Quadband / class 10 | FEATURES | M100 2G | M100 CDMA plus | M100 3G XT | | | | |
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| M-CDMA FADPA Up to 3.6Mbps downlink Voice / Data / Fax / SMS V V V V V V V V V | CELLULAR TECHNOLOGY | | | | | | | |
| V-CDA / HSDPA V-CDA / Fax / SMS V- V-CA | GSM / GPRS / EDGE | Quadband / class 10 / class 10 | | Quadband / class 10 / class 12 | | | | |
| Notice / Data / Fax / SMS | CDMA2000 1X | | ✓ | | | | | |
| TCP / UDP / FTP / HTTP / SMTP / POP3 / SMMP / SSL DCATION TECHNOLOGY FOP (NMEA popt and command) | W-CDMA / HSDPA | | Up to 3.6Mbps downlink | | | | | |
| COCATION TECHNOLOGY Standalone, gpsOne™ Standalone, gpsOneXTRA™, A-GPS GPS Specifications GpsOne™ A-GPS Cold start sensitivity / TIFF 4-145 dBm / 39 s 4-153 dBm / < 3 s 1-153 dBm / < 3 s 1-153 dBm / < 3 s 1-153 dBm / < 3 s 1-150 dBm s 1-155 dBm / < 3 s 1-150 dBm s 1-155 dBm / < 3 s 1-150 dBm s 1-155 dBm / < 3 s 1-150 dBm s 1-155 dBm / < 3 s 1-150 dBm / < 2 m / FUNCTIONAL FEATURES FUNCTIONAL FEATURES A Command set 5 300 Sierra Wireless Solutions Smart Pack II Autor baud-rate dettion, auto-TCP/UDP, self-healing protocology FUNCTIONAL FEATURES Sierra Wireless Solutions Smart Pack II Autor baud-rate dettion, auto-TCP/UDP, self-healing protocology Sierra Wireless Solutions Smart Pack II Autor baud-rate dettion, auto-TCP/UDP, self-healing protocology Casing Autor baud-rate dettion, auto-TCP/UDP, self-healing protocology Casing Aluminium alloy UN rall mountable A Juna rall mountable A Jun | Voice / Data / Fax / SMS | / | 1 | | | | | |
| GPS (NMEA port and command) A- GPS Standalone, gpsOne™ A- GPS GPS Specifications gpsOne™ A- GPS Cold start sensitivity / TTFF -145 dBm / 9 s -153 dBm / < 3 s | Internet services | TCP / UDP / FTP / HTTP / SMTP / POP3 / SNMP / SSL | | | | | | |
| GPS Specifications gps0ne™ A-GPS Cold start sensitivity / TTFF -145 dBm / 9 s -153 dBm / < 5 s | LOCATION TECHNOLOGY | | | | | | | |
| Cold start sensitivity / TTFF | GPS (NMEA port and command) | | Standalone, gpsOne™ | | | | | |
| Hot start sensitivity / TTFF | GPS Specifications | | gpsOne™ | | | | | |
| Tracking sensitivity Count of per sky Count | Cold start sensitivity / TTFF | | -145 dBm / 39 s | | | | | |
| 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 J Casing Aluminum alloy DIN rail mountable J INTERFACES J SIM 1.8V / 3.0V 1.8V / 3.0V RS-232C on 15-pin sub-D connector J VSB 2.0 on mini-B female connector (slave only) Power supply (on 2 pins) Micro-Fit TM 4-pin connector 1 x digital input / output (on 1 pin) 2 x digital input / output Micro-Fit TM 4-pin connector 1 x cellular and 1 x GPS (passive and active) 1 x cellular and 1 x GPS (passive and active) 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 DIMENSIONS Size without connectors 62.8 x 60 x 21.8mm | Hot start sensitivity / TTFF | | -158 dBm / 9 s | -153 dBm / < 3 s | | | | |
| 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 Casing | Tracking sensitivity | | -160 dBm | -155 dBm | | | | |
| AT command set > 300 Sierra Wireless Open AT ® Application Framework ✓ Maestro Wireless Solutions Smart Pack II Auto baud-rate dection, 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 ✓ SIM 1.8V / 3.0V SIM 1.8V / 3.0V SSUBJECT Out 15-pin sub-D connector USB 2.0 on mini-B female connector (slave only) ✓ Micro-Fit™ 4-pin connector 1x digital input / output (on 1 pin) 1x digital input / output (on 1 pin) Micro-Fit™ 4-pin connector 1x digital input / output (on 1 pin) 1x digital input / output (on 2 pins) SMA antenna connector (50 Ω) 1x cellular 1x cellular and 1x GPS (passive and active) Operating SWE without connectors 62.8 x 60 x 21.8mm Difference on the colspan="3">Cellular and 1x GPS (passive and active) Operating | Accuracy in open sky | | < 3 m | < 2 m | | | | |
| 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 2.32C on 15-pin sub-D connector ✓ USB 2.0 on mini-B female connector (slave only) 1x digital input / output (on 1 pin) 2x digital input / output (on 1 pin) Micro-Fit™ 4-pin connector 1x digital input / output (on 1 pin) 1x digital input (on 1 pin) 2x digital input / output (on 2 pins) SMA antenna connector (50 Q) 1x cellular 1x cellular and 1x GPS (passive and active) (passive and active) DIMENSIONS Size without connectors 62.8 x 60 x 21.8mm Weight 90g TEMPERATURE RANGE Operating POWER SUPPLY | FUNCTIONAL FEATURES | | | | | | | |
| Masestro Wireless Solutions Smart Pack II Auto baud-rate detection, auto-TCP/UDP, self-healing protol, DynDNS, etc. Download Over The Air / Autorestore - timer reset / OFFERENTURES Operating status LED / Casing Aluminium alloy DIN rail mountable / INTERFACES SIM 1.8V / 3.0V 1.8V / 3.0V MSS-232C on 15-pin sub-D connector / USB 2.0 on mini-B female connector (slave only) Power supply (on 2 pins) Micro-Fit TM 4-pin connector 1 x digital input / output (on 1 pin) 2 x digital input / output (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 TEMPPERATURE RANGE Operating -40°C ~ +85°C POWER SUPPLY | AT command set | | > 300 | | | | | |
| 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 1 x digital input / output (on 1 pin) 1 x digital input (on 1 pin) 1 x analogue input (on 1 pin) 1 x digital input (on 1 pin) 2 x digital input / output (on 2 pins) SMA antenna connector (50 Ω) 1 x cellular 1 x cellular and 1 x GPS (passive and active) (passive and active) (passive and active) DIMENSIONS Size without connectors 62.8 x 60 x 21.8mm Weight 90g TEMPERATURE RANGE Operating -40°C ~ +85°C POWER SUPPLY | Sierra Wireless Open AT [®] Application Framework | ✓ | | | | | | |
| 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) Power supply (on 2 pins) Micro-Fit™ 4-pin connector 1 x digital input / output (on 1 pin) 2 x digital input / output (on 2 pins) 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) Size without connectors 62.8 x 60 x 21.8mm Weight Deprating Certification Operating POWER SUPPLY | Maestro Wireless Solutions Smart Pack II | Auto baud-rate detection, auto-TCP/UDP, self-healing protocol, DynDNS, etc. | | | | | | |
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| Operating status LED ✓ Casing Aluminium alloy DIN rail mountable ✓ INTERFACES SIM 1.8V / 3.0V 1.8V / 3.0V SS-232C on 15-pin sub-D connector ✓ USB 2.0 on mini-B female connector (slave only) ✓ Power supply (on 2 pins) Micro-Fit™ 4-pin connector 1 x digital input / output (on 1 pin) 1 x digital input (on 2 pins) 1 x callular 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 -40°C ~ +85°C POWER SUPPLY | Autorestore - timer reset | / | | | | | | |
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| SIM 1.8V / 3.0V 1.8V / 3.0V RS-232C on 15-pin sub-D connector | DIN rail mountable | / | | | | | | |
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| Power supply (on 2 pins) Micro-Fit™ 4-pin connector 1 x digital input / output (on 1 pin) 1 x digital input / output (on 1 pin) 2 x digital input / output (on 2 pins) 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 -40°C ~ +85°C POWER SUPPLY | RS-232C on 15-pin sub-D connector | | ✓ | | | | | |
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| 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) 1 x cellular and 1 x GPS (passive and active) 1 x cellular and 1 x GPS (passive and active) 1 x cellular and 1 x GPS (passive and active) 1 x cellular and 1 x GPS (passive and active) 1 x cellular and 1 x GPS (passive and active) 1 x cellular and 1 x GPS (passive and active) 1 x cellular and 1 x GPS (passive and active) 1 x cellular and 1 x GPS (passive and active) 1 x cellular and 1 x GPS (passive and active) 1 x cellular and 1 x GPS (passive and active) 1 x cellular and 1 x GPS (passive and active) 1 x cellular and 1 x GPS (passive and active) 1 x cellular and 1 x GPS (passive and active) 1 x cellular and 1 x GPS (passive and active) 1 x cellular and 1 x GPS (passive and active) 1 x cellular and 1 x GPS (passive and active) 1 x cellular and 1 x GPS (passive and active) 1 x cellular and 1 x GPS (passive and active) 1 x cellular and 1 x GPS (passive and active) 1 x cellular and 1 x GPS (passive and active) 1 x cellular and 1 x GPS (passive and active) 1 x cellular and 1 x GPS (passive and active) 1 x cellular and 1 x GPS (passive and active) 1 x cellular and 1 x GPS (passive and active) 1 x cellular and 1 x GPS (passive and active) 1 x cellular and 1 x GPS (passive and active) 1 x cellular and 1 x GPS (passive and active) 1 x cellular and 1 x GPS (passive and active) 1 x cellular and 1 x GPS (passive and active) 1 x cellular and 1 x GPS (passive and active) 1 x cellular and 1 x GPS (passive and active) 1 x cellular and 1 x GPS (passive and active) 1 x cellular and 1 x cellular and 1 x GPS (passive and active) 1 x cellular and 1 x cellular and 1 x GPS (passive and active) 1 x cellular and 1 x cellular and 1 x GPS (passive and active) 1 x cellular and 1 x cellular and 1 x GPS (passive and active) 1 x cellular and 1 x cellular and 1 x GPS (passive and active) 2 x cellular and 1 x cellular and 1 x cellular and 1 x cellular and 1 x cellular an | | 1 x digital input / output (on 1 pin) | 1 x digital input (on 1 pin) | 2 x digital input / output | | | | |
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| DIMENSIONS Size without connectors 62.8 x 60 x 21.8mm Weight 90g TEMPERATURE RANGE Operating -40°C ~ +85°C POWER SUPPLY | SMA antenna connector (50 Ω) | 1 x cellular | | | | | | |
| Size without connectors 62.8 x 60 x 21.8mm Weight 90g TEMPERATURE RANGE Operating -40°C ~ +85°C POWER SUPPLY | DIMENSIONS | | (,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | (5-2 | | | | |
| Weight 90g TEMPERATURE RANGE Operating -40°C ~ +85°C POWER SUPPLY | | 62.8 x 60 x 21.8mm | | | | | | |
| TEMPERATURE RANGE Operating -40°C ~ +85°C POWER SUPPLY | | | | | | | | |
| Operating -40°C ~ +85°C POWER SUPPLY | - | | - | | | | | |
| POWER SUPPLY | | -40°C ~ +85°C | | | | | | |
| | | | | | | | | |
| | | 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 | 1 | | | ✓ | ✓ | | |
| FCC | | 1 | 1 | | | | |
| PTCRB | | | ✓ | | | | |
| A-Tick | | | | ✓ | ✓ | | |
| CARRIER | | | | | | | |
| AT&T / Rogers Wireless | | | ✓ | | | | |
| Verizon Wireless | | 1 | | | | | |
| Telstra | | | | | 1 | | |
| YES Optus | | | | 1 | | | |
| NTT Docomo | | | | | ✓ | | |

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