

The MultiConnect Cell 100 Series cellular modem is a compact communications platform that provides cellular capabilities for fixed and mobile applications. It is intended for use in settings demanding reliable performance under rugged conditions, low power and long range such as remotely monitoring solar micro-inverters, power generators, tanks, pipelines, meters, pumps and valves in any energy, utility, or industrial application.

The MultiConnect Cell 100 Series family has also been successfully deployed by professionals in emergency services, vending, remote patient monitoring, renewable energy systems, End-of-Train system management and process automation. MultiConnect Cell 100 Series modems are fully certified for deployment in multiple geographies around the world, so you can get to market extremely fast. Designed specifically for M2M applications, they provide a long, stable lifecycle and are durable, reliable and easy to deploy.

## **BENEFITS**

- Quick deployments to shorten time to market
- Long and stable lifecycles
- Certified and carrier approved

### **FEATURES**

- 4G-LTE Cat 4 and Cat M1 models
- SSL/TLS support
- Models with USB or RS-232 serial interfaces
- Configured using AT commands
- FCC, PTCRB, Industry Canada, and RED certified
- Rugged, military and SAE tested
- Two-year warranty, upgradable to five years



# **SPECIFICATIONS**

| Models                             | MTC-MNA1  | MTC-LNA4   | MTC-LEU4  |  |  |
|------------------------------------|---|--|---|--|--|
| Performance                        | LTE Cat M1  | LTE Cat 4  |   |  |  |
| Frequency Band (MHz)               | AT&T: 3GPP Rel. 13<br>B2 (1900MHz),<br>B4 (AWS1700MHz), B12 (700MHz | 3GPP Rel. 13 4G:700(B12/B13)/<br>850(B5)/AWS1700(B4) 1900(B2)  | 3GPP Rel. 13<br>4G: B1 (2100)/B3 (1800)/<br>B7 (2600)/B8 (900)/ B20 (700)<br>3G: B1 (2100)/B8 (900) |  |  |
|                                    | Verizon: B4 (AWS1700MHz),<br>B13 (700MHz)                           | 3G AT&T only: 850(B5)/1900(B2)   | 2G: B3 (1800)/B8 (900)  |  |  |
| Packet Data*                       | Up to 300 Kbps downlink,<br>up to 375 Kbps uplink                   | 3GPP Up to 150 Mbps downlink/<br>Up to 50 Mbps uplink (Category 4)   |   |  |  |
| Diversity/MIMO                     | N/A   | Rx Diversity and MIMO DL 2x2   |   |  |  |
| SMS                                | Point-to-Point Mes<br>(for SMS solutions when using                 | Messaging, Mobile-Terminated SMS, Mobile-Originated SMS sing the Verizon cellular network, contact a MultiTech sales representative) |   |  |  |
| Power Requirements                 |   |  |   |  |  |
| Voltage                            | USB Models: USB powered - 5V<br>RS-232 Models: 7 - 32VDC            | USB pow  | vered - 5V  |  |  |
| Connectors                         |   |  |   |  |  |
| RF Antenna                         | External 50 ohm SMA (female connector)                              |  |   |  |  |
| SIM                                | Mini SIM (2FF); 1.8 and 3V  |  |   |  |  |
| USB                                | Type B mini USB   |  |   |  |  |
| RS-232                             | DE-9 (female connector)   |  |   |  |  |
| Power                              | RS-232 Models: 2.5 mm miniature (screw-on)                          |  |   |  |  |
| Physical Description               |   |  |   |  |  |
| Dimensions (L x W x H)             | 3.17" x 2.45" x 1.16" (8.05 cm x 6.22 cm x 2.95 cm)                 |  |   |  |  |
| Weight                             | 0.65 lbs (0.295 Kg)   |  |   |  |  |
| Chassis Type                       | Aluminum  |  |   |  |  |
| Environmental                      |   |  |   |  |  |
| Operating Temperature <sup>†</sup> | -40° to +185° F (-40° to +85° C)                                    |  |   |  |  |
| Storage Temperature                | -40° to +185° F (-40° to +85° C)                                    |  |   |  |  |
| Humidity                           | Relative humidity 15% to 93% noncondensing                          |  |   |  |  |
| Certifications                     |   |  |   |  |  |
| Regulatory                         | FCC Class B (US)<br>IC (Canada)                                     | FCC Class B (US)<br>IC (Canada)  | RED<br>(EU Economic Area)   |  |  |
| Safety                             | UL60950-1 (US)  | UL 60950-1 (US)<br>cUL 60950-1 (Canada)  | IEC60950-1<br>(EU Economic Area)  |  |  |
| Network                            | PTCRB, AT&T, Verizon  | PTCRB, AT&T, Verizon   | N/A   |  |  |
| Quality                            |   | MIL-STD-810G: High Temp, Low Temp, Cold Dwell, Random Vibration and Sine Vibration SAE J1455: Random Vibration and Sine Vibration    |   |  |  |

<sup>\*</sup> Actual performance speeds may be affected by a variety of attributes such as cell tower distance, data loads, packet sizes, etc.

† Device has been tested up to +85° C. UL Recognized @ 40° C, limited by AC power supply. UL Recognized @ 60° C when used with the fused DC power cable, part number FPC-532-DC. Note: The radio's performance may be affected at the temperature extremes. This is considered normal. There is no single cause for this function. Rather, it is the result of an interaction of several factors, such as the ambient temperature, the operating mode and the transmit power.

## **HIGHLIGHTS**

## **Applications**

The MultiConnect® Cell 100 Series cellular modems are ideal for automated machine-to-machine applications such as remote diagnostics and remote monitoring which periodically need to send or receive data over a wireless network.

# ORDERING INFORMATION

#### LTE Products

| Model            | Description  | Bundle Available | Region  |
|------------------|--|------------------|---------|
| MTC-LNA4-B01-xx  | LTE Cat 4 Modem, RS-232 interface<br>(AT&T - Verizon Dual mode cell)                     | Yes              | US/Can  |
| MTC-LNA4-B03     | LTE Cat 4 Modem, USB interface without Accessories (AT&T - Verizon Dual mode cell)       |                  | US/Can  |
| MTC-LNA4-B03-KIT | LTE Cat 4 Modem, USB interface with<br>USB Accessory Kit (AT&T - Verizon Dual mode cell) | Included         | US/Can  |
| MTC-LEU4-B01-xx  | LTE Cat 4 Modem, RS-232 interface with EU/UK Accessory Kit                               | Yes              | Euro/GB |
| MTC-LEU4-B03     | LTE Cat 4 Modem, USB interface without Accessories                                       |                  | Euro/GB |
| MTC-LEU4-B03-KIT | LTE Cat 4 Modem, USB interface with USB Accessory Kit                                    | Included         | Euro/GB |
| MTC-MNA1-B01-xx  | LTE Cat M1 Modem (RS-232 interface) - AT&T/Verizon                                       | Yes              | US      |
| MTC-MNA1-B03     | LTE Cat M1 Modem (USB interface)<br>includes USB cable - AT&T/Verizon                    |                  | US      |
| MTC-MNA1-B03-KIT | LTE Cat M1 Modem (USB interface)<br>with USB Accessory Kit - AT&T/Verizon                | Included         | US      |

#### -xx Ordering Codes for MTC-LTE Models

Blank Device only, no accessories

-US Includes US style power supply, antenna(s) and RS-232 cable
-EU-GB Includes EU & UK style power supply, antenna(s) and RS-232 cable
-KIT Includes antenna and USB cable (USB models only, USB powered)

Use ordering codes for specific build options.

Go to www.multitech.com for detailed product model numbers.

## **Services & Warranty**

MultiTech's comprehensive Support Services programs offer a full array of options to suit your specific needs. These services are aimed at protecting your investment, extending the life of your solution or product, and reducing total cost of ownership. Our seasoned technical experts, with an average tenure of more than 10 years, can walk you through smooth installations, troubleshoot issues and help you with configurations.

### **Technical Support Services**

At MultiTech, we're committed to providing you personalized attention and quality service while providing you a quick response to your product support needs. We have several options of support for you to choose from.

For additional information on Support Services as well as other service offerings, please contact your MultiTech representative or visit www.multitech.com/support.go



### **World Headquarters**

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Produced in the U.S. of U.S. and non-U.S. components. Features and specifications are subject to change without notice.

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