

# MultiConnect<sup>®</sup> Cell 100 Series

Cellular Modems now supporting LTE Cat 4



The MultiConnect<sup>®</sup> 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 (Cat 4, Cat 3 and Cat M1) and 3G models
- SSL/TLS support
- LTE and GSM models available
- 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

### Your Devices & Data



### Connecting Your Devices



Wireless Service Provider

### Insight + Action + Control



## SPECIFICATIONS

Models	MTC-MNA1	MTC-LNA4	MTC-LEU4
Performance	LTE Cat M1	LTE Cat 4	
Frequency Band (MHz)	AT&T: 3GPP Rel. 13 B2 (1900MHz), B4 (AWS1700MHz), B12 (700MHz) Verizon: B4 (AWS1700MHz), B13 (700MHz)	3GPP Rel. 13 4G:700(B12/B13)/850(B5)/AWS1700(B4) 1900(B2) 3G AT&T only: 850(B5)/1900(B2)	3GPP Rel. 13 4G: B1 (2100)/B3 (1800)/B7 (2600)/B8 (900)/ B20 (700) 3G: B1 (2100)/B8 (900) 2G: B3 (1800)/B8 (900)
Packet Data*	Up to 300 Kbps downlink, up to 375 Kbps uplink	3GPP Up to 150 Mbps downlink/ Up to 50 Mbps uplink (Category 4)	
Diversity/MIMO	N/A	Rx Diversity and MIMO DL 2x2	
SMS	Point-to-Point Messaging, Mobile-Terminated SMS, Mobile-Originated SMS		
Power Requirements			
Voltage	USB Models: USB powered - 5V RS-232 Models: 7 - 32VDC	USB powered - 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†	-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) IC (Canada)	FCC Class B (US) IC (Canada)	RED (EU Economic Area)
Safety	UL60950-1 (US)	UL 60950-1 (US) cUL 60950-1 (Canada)	IEC60950-1 (EU Economic Area)
Network	PTCRB, AT&T, Verizon	PTCRB, AT&T, T-Mobile	N/A
Quality	MIL-STD-810G: High Temp, Low Temp, Cold Dwell, Random Vibration and Sine Vibration SAE J1455: Random Vibration and Sine Vibration		

\* 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.

## SPECIFICATIONS

Models	MTC-LAT1	MTC-LVW2	MTC-H5
Performance	LTE Cat 3		HSPA+
Frequency Band (MHz)	4G:700(B17)/850(B5)/ AWS1700(B4) 1900(B2) 3G: 850(B5)/1900(B2) 2G: 850/1900	4G: 700(B13)/ AWS1700(B4)	Hepta-band 850/900/ AWS 1700/1900/2100
Packet Data*	Up to 100 Mbps downlink, up to 50 Mbps uplink (Category 3)		Up to 21.0 Mbps downlink, up to 5.76 Mbps uplink
Diversity/MIMO	Rx Diversity and MIMO DL 2x2	Rx Diversity and MIMO DL 2x2	N/A
SMS	Point-to-Point Messaging, Mobile-Terminated SMS, Mobile-Originated SMS		Text & PDU, Point-to-Point
<b>Power Requirements</b>			
Voltage	USB Models: USB powered - 5V RS-232 Models: 7 - 32VDC		USB Models: USB powered RS-232 Models: 5 - 32VDC
<b>Connectors</b>			
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)		
<b>Physical Description</b>			
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		
<b>Environmental</b>			
Operating Temperature†	-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		
<b>Certifications</b>			
Regulatory	FCC Class B (US) IC (Canada)	FCC Class B (US)	FCC Class B (US), IC (Canada), RED (EU Economic Area, RCM (Australia/NZ), IFT (Mexico)
Safety	UL 60950-1 (US) cUL 60950-1 (Canada)	UL 60950-1 (US)	UL 60950-1 (US) cUL 60950-1 (Canada), IEC60950-1 (EU Economic Area) AS/NZS 60950-1 (Australia/NZ)
Network	PTCRB, AT&T, T-Mobile	Verizon	PTCRB, AT&T, T-Mobile, Rogers, Bell
Quality	MIL-STD-810G: High Temp, Low Temp, Cold Dwell, Random Vibration and Sine Vibration SAE J1455: Random Vibration and Sine Vibration		

\* 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-US	LTE Cat 4 Modem, RS-232 interface with Accessory Kit (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)	Yes	US/Can
MTC-LNA4-B03-KIT	LTE Cat 4 Modem, USB interface with USB Accessory Kit (AT&T - Verizon Dual mode cell)	Yes	US/Can
MTC-LEU4-B01-EU-GB	LTE Cat 4 Modem, RS-232 interface with EU/UK Accessory Kit (Europe)	Yes	Europe
MTC-LEU4-B03-KIT	LTE Cat 4 Modem, USB interface with USB Accessory Kit (Europe)	Yes	Europe
MTC-LAT1-B01-xx	LTE Cat 3 Modem with fallback (RS-232 interface) - AT&T	Yes	US/Can
MTC-LAT1-B02-xx	LTE Cat 3 Modem with GPS and fallback (RS-232 interface) - AT&T	Yes	US/Can
MTC-LAT1-B03-xx	LTE Cat 3 Modem with fallback (USB interface) includes USB cable - AT&T	Yes	US/Can
MTC-LVW2-B01-xx	LTE Cat 3 Modem (RS-232 interface) - Verizon	Yes	US
MTC-LVW2-B02-xx	LTE Cat 3 Modem with GPS (RS-232 interface) - Verizon	Yes	US
MTC-MNA1-B01-xx	LTE Cat M1 Modem (RS-232 interface) - AT&T/Verizon	Yes	US
MTC-MNA1-B03-xx	LTE Cat M1 Modem (USB interface) includes USB cable - AT&T/Verizon	Yes	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
-KIT	Includes antenna and USB cable (USB models only, USB powered)

### HSPA+ Global Products

Model	Description	Bundle Available	Region
MTC-H5-B01-xx	HSPA+ Modem (RS-232 interface)	Yes	Global
MTC-H5-B03-xx	HSPA+ Modem (USB interface) includes USB cable	Yes	Global

#### -xx Ordering Codes for MTC-H5 Models

Blank	Device only, no accessories
-US-EU-GB	Includes US, EU & UK style power supply, antenna(s) and RS-232 cable
-KIT	Includes antenna (USB models only, USB powered)
-N16	For Aeris Communications Networks

### GPRS Products for Europe

Model	Description	Bundle Available	Region
MTC-G3-B06-xx	GPRS Modem (RS-232 interface)	Yes	EU
MTC-G3-B08-KIT	GPRS Modem (USB interface)	Included	EU

#### -xx Ordering Codes for MTC-H5 Models

Blank	Device only, no accessories
-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](http://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.

### Installation Support

MultiTech's Installation Support Service delivers priority service with the ability to work one-on-one with an experienced MultiTech technical support engineer, to guide you through the installation process for our products.

### 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](http://www.multitech.com/support.go)

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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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