

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

Cellular Modems now supporting  
LPWA LTE Cat M1 and NB-IoT



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.

## FEATURES

- 4G (Cat 3 and Cat M1), NB-IoT, 3G and 2G models
- SSL/TLS support
- LTE, GSM and CDMA 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

## BENEFITS

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

### Your Devices & Data



### Connecting Your Devices



Wireless Service Provider

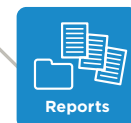


Asset Management Platform

### Insight + Action + Control



Alerts



Reports



Real-Time Management

## SPECIFICATIONS

Model	MTC-MAT1	MTC-MVW1	MTC-NEU1	MTC-LAT1	MTC-LVW2
Performance	LTE Cat M1		NB-IoT	LTE Cat 3	
Frequency Band (MHz)	3GPP Rel. 13 B2 (1900MHz), B4 (AWS1700MHz), B12 (700MHz)	3GPP Rel. 13 B4 (AWS1700MHz), B13 (700MHz)	3GPP Rel. 13 B8 (900MHz) B20 (800MHz)	4G: 700(B17)/850(B5)/AWS1700(B4) 1900(B2) 3G: 850(B5)/1900(B2) 2G: 850/1900	4G: 700(B13)/AWS1700(B4)
Packet Data*	Up to 300 Kbps downlink Up to 375 Kbps uplink		Up to 300 Kbps downlink Up to 375 Kbps uplink	Up to 100 Mbps downlink/ Up to 50 Mbps uplink (Category 3)	
Diversity/MIMO	N/A			Rx Diversity and MIMO DL 2x2	
SMS	Point-to-Point Messaging, Mobile-Terminated SMS, Mobile-Originated SMS		N/A	Point-to-Point Messaging, Mobile-Terminated SMS, Mobile-Originated SMS	
Operating System Support	Windows XP/Vista/7/8/2007/2008 (32-bit/64-bit), 2003 (32-bit) Linux (2.6.x or greater)				
<b>Power Requirements</b>					
Voltage	USB Models: USB powered - 5V RS-232 Models: 5 - 32VDC		USB powered - 5V	USB Models: USB powered - 5V 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>					
Physical 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)				
Physical 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)				
Relative Humidity	15% to 93% noncondensing				
<b>Certifications</b>					
Regulatory Compliance	FCC Class B (US) IC (Canada)	FCC Class B (US)	RED (Pending)	FCC Class B (US), IC (Canada)	FCC Class B (US)
Safety	UL 60950-1	UL 60950-1 (US)	IEC 60950-1 (Pending)	UL 60950-1 (US), cUL 60950-1 (Canada)	UL 60950-1 (US)
Network	PTCRB AT&T, T-Mobile,	Verizon	N/A	PTCRB, GCF approved module, AT&T, T-Mobile, EU carriers Pending: Rogers, Bell, Telus, Telstra	Verizon
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

Model	MTC-H5	MTC-EV3	MTC-G3	MTC-C2
Performance	HSPA+	EV-DO	GPRS Class 10	1xRTT
Frequency Band (MHz)	Hepta-band 850/900/AWS 1700/1900/2100	Dual-band 800/1900	Quad-band 850/900/1800/1900	Dual-band 800/1900
Packet Data*	Up to 21.0 Mbps downlink Up to 5.76 Mbps uplink	Up to 3.1 Mbps downlink Up to 1.8 Mbps uplink	Up to 85.6 K downlink Up to 85.6 K uplink	Up to 153.6 K downlink Up to 153.6 K uplink
SMS	Text & PDU, Point-to-Point		Point-to-Point Messaging, Mobile-Terminated SMS, Mobile-Originated SMS	
Operating System Support	Windows XP/Vista/7/8/2007/2008 (32-bit/64-bit), 2003 (32-bit) Linux (2.6.x or greater)			
<b>Power Requirements</b>				
Voltage	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	N/A	Mini SIM (2FF); 1.8 and 3V	N/A
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>				
Physical 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)			
Physical 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)			
Relative Humidity	15% to 93% noncondensing			
<b>Certifications</b>				
Regulatory Compliance	FCC Class B (US), IC (Canada), RED (EU Economic Area, RCM (Australia/NZ), and IFT (Mexico)	FCC Class B (US)	RED (EU Economic Area)	FCC Class B (US)
Safety	UL 60950-1 (US), cUL 60950-1 (Canada), IEC60950-1 (EU Economic Area), AS/NZS 60950-1 (Australia/NZ)	UL 60950-1 (US)	IEC60950-1 (EU Economic Area)	UL 60950-1 (US)
Network	PTCRB, GCF approved module, AT&T, T-Mobile, Rogers, Bell, EU carriers <b>Pending:</b> Telus, Telstra	Verizon, Aeris	GCF approved module (EU carriers)	Verizon, Sprint, Aeris
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.

### Comprehensive Service and Support

The MultiTech commitment to service means we provide a two year product warranty and service that includes free technical support, 24 hour website, and FTP support.

## ORDERING INFORMATION

### LTE Products

Model	Description	Bundle Available	Region
MTC-LATI-B01-xx	LTE Cat 3 Modem with fallback (RS-232 interface) - AT&T	Yes	US/Can
MTC-LATI-B02-xx	LTE Cat 3 Modem with GPS and fallback (RS-232 interface) - AT&T	Yes	US/Can
MTC-LATI-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-MATI-B01-xx	LTE Cat M1 Modem (RS-232 interface) - AT&T	Yes	US
MTC-MATI-B03-xx	LTE Cat M1 Modem (USB interface) includes USB cable - AT&T	Yes	US
MTC-MVW1-B01-xx	LTE Cat M1 Modem (RS-232 interface) - Verizon	Yes	US
MTC-MVW1-B03-xx	LTE Cat M1 Modem (USB interface) includes USB cable - Verizon	Yes	US
<b>-xx Ordering Codes for MTC-LTE Models</b>			
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)		

### Narrow Band IoT (NB-IoT) Products

Model	Description	Bundle Available	Region
MTC-NEU1-KIT	NB-IoT (USB interface)	Included	EU
<b>-xx Ordering Codes for MTC-NB-IoT Models</b>			
-KIT	Includes antenna and USB		

### 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
<b>-xx Ordering Codes for MTC-H5 Models</b>			
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)		

### 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
<b>-xx Ordering Codes for MTC-G3 Models</b>			
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)		

### EV-DO Products for United States\*

Model	Description	Bundle Available	Region
MTC-EV3-B01-Nxx-xx	EV-DO Modem (RS-232 interface)	Yes	US
MTC-EV3-B03-Nxx-xx	EV-DO Modem (USB interface)	Yes	US

\* Not available for Sprint Networks.

### 1xRTT Products for United States

Model	Description	Bundle Available	Region
MTC-C2-B06-Nxx-xx	1xRTT Modem (RS-232 interface)	Yes	US
MTC-C2-B08-Nxx-KIT	1xRTT Modem (USB interface) includes USB cable	Yes	US
<b>-xx Ordering Codes for MTC-EV3 and MTC-C2 Models</b>			
Blank	Device only, no accessories		
-US	Includes US style power supply, antenna(s) and RS-232 cable		
-KIT	Includes antenna and USB cable		
<b>-Nxx Carrier Codes for MTC-C2 Models</b>			
-N2	For Sprint Networks (C2 models only)		
-N3	For Verizon Wireless Networks		
-N16	For Aeris Communications Networks		

Use ordering codes for specific build options.  
Go to [www.multitech.com](http://www.multitech.com) for detailed product model numbers.

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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## 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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