MULTITECH (

Anterix



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

# Cellular Modems

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.

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
- Extended service life
- Certified and carrier approved

#### **FEATURES**

- 4G-LTE Cat 4 and Cat M1 models
- Anterix 900 MHz Network model
- SSL/TLS support
- Models with USB or RS-232 serial interfaces
- Configured using AT commands
- CE, FCC, IC, RCM, UKCA Certified models available
- \* PTCRB Approved
- Rugged, military and SAE tested
- Two-year warranty, upgradable to five years



#### **SPECIFICATIONS\***

Models	MTC-L4G2D	MTC-LNA4	MTC-LEU4			
Regions	Australia Canada European Union United Kingdom United States	Canada United States	European Union United Kingdom			
Performance**	3GPP Release 10 4G-LTE FDD/TDD Category 4 150 Mbps peak downlink 50 Mbps peak uplink with 3G/2G fallback	3GPP Release 13 4G-LTE FDD Category 4 150 Mbps peak downlink 50 Mbps peak uplink with 3G fallback	3GPP Release 13 4G-LTE FDD Category 4 150 Mbps peak downlink 50 Mbps peak uplink with 3G/2G fallback			
Frequency Band (MHz )	with 3G/2G fallback  4G LTE FDD (Europe): B3(1800), B7(2600), B8(900), B20(800)  2G (Europe Fallback): B2(1900), B3(1800), B5(850), B8(900)  4G LTE FDD (AT&T): B2(1900), B4(AWS1700), B12(700), B14 (700-FirstNet)†  4G LTE FDD (Verizon): B4(AWS1700), B13(700)  4G LTE FDD (Anterix): B8-US(900)  4G LTE FDD (APAC): B1(2100), B9(1800), B18(800), B19(850), B26(850), B28(700)  3G: B1(2100), B2(1900), B4(AWS1700), B5(850), B6, B8(900), B19(850)  2G: B2(1900), B3(1800), B5(850), B8(900)	### ### ### ### ### ### ### ### ### ##	### 3G/2G fallback  4G LTE FDD (Europe): B1(2100), B3(1800), B7(2600), B8(900), B20(800)  3G (Europe Fallback: B2(1900), B8(900)  2G (Europe Fallback): B3(1800), B8(900)			
	4G LTE FDD Bands: B25(1900)  Mobile Originate / Mobile Terminated /	Mobile Originate / Mobile Terminated /	Mobile Originate / Mobile Terminated			
SMS	Point-to-Point	Point-to-Point ***	Point-to-Point			
Serial (-B01 Models)		RS-232 (UART Interface)				
JSB (-B03 Models)	2.0 high speed compatible QMI compliant  2.0 high speed compatible CDC-ACM compliant					
FCP/IP Functions	FTP, SMTP, TCP, UDP		SSL, TCP, UDP			
onnectors						
Connectors (-B01 Models)		Antenna: 2 SMA (cellular, auxiliary) Mini SIM (2FF); 1.8V & 3V RS-232: DE-9 (female) Power: 2.5 mm miniature (screw-on) Antenna: 2 SMA (cellular, auxiliary)				
Connectors (-B03 Models)		Mini SIM (2FF); 1.8V & 3V USB: Type B mini-USB Power: Type B mini-USB				
Physical Description						
Dimensions	3.1	7" x 2.45" x 1.16" (8.05 cm x 6.22 cm x 2.95 cm	m)			
Weight		0.65 lbs (0.295 kg)				
Chassis		Aluminum				
ower Requirements						
Input Power (-B01 Models)	7 - 32 VDC	5 - 32	2 VDC			
Power Draw (-B01 Models) Serial Models @ 9VDC	Sleep Mode: 34 mA / Idle: 24 mA Max Power: 287 mA (average)	Sleep Mode: 34 mA / Idle: 30 mA Max Power: 309 mA (average)	Sleep Mode: 13 mA / Idle: 33 mA Max Power: 232 mA (average)			
Low Power Mode (-B01 Models)		Yes				
Input Power (-B03 Models)		5 VDC				
Power Draw (-B03 Models) USB Models @ 5VDC	Sleep Mode: N/A / Idle: 33 mA Max Power: 534 mA (average)	Sleep Mode: N/A / Idle: 38 mA Max Power: 616 mA (average)	Sleep Mode: N/A / Idle: 33 mA Max Power: 430 mA (average)			
Environmental						
Operating Temperature****	-40° to +185° F /	(-40° to +85° C)	-40° to +140° F / (-40° to +60° C)			
Storage Temperature		-40° to +185° F / (-40° to +85° C)				
Relative Humidity	15% - 93% RH non-condensing	20% - 90% RH non-condensing	15% - 93% RH non-condensing			
Certifications						
EMC and Radio Compliance	CE, FCC, IC, RCM, UKCA	FCC, IC	CE, UKCA			
Safety Compliance		UL/cUL/IEC 60950-1				
	PTCRB N/A					
Network Compliance		AT&T, Verizon N/A MIL-STD-810G: High Temp, Low Temp, Cold Dwell, Random Vibration and Sine Vibration				
Network Compliance  Network Operator  Quality						

<sup>\*</sup> See device guides or AT command guides for additional information.

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

\*\*\* For SMS solutions when using the Verizon cellular network, contact MultiTech Product Support.

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

†All future end-user (OEM) devices will and must go through FirstNet certification prior to being included in the FirstNet device ecosystem.

#### **SPECIFICATIONS\***

Models	MTC-MNG6				
	Australia Canada				
Regions	European Union United Kingdom				
	United States				
	3GPP Release 14 4G LTE FDD Cat M1 M1: 588 Kbps peak downlink				
Performance**	1 Mbps peak downlink 2G: 264 Kbps peak downlink				
	210 Kbps peak uplink				
	<b>4G LTE FDD (Europe):</b> B1(2100), B3(1800), B8(900), B20(800)				
	<b>2G (Europe Fallback):</b> B2(1900), B3(1800), B5(850), B8(900)				
	<b>4G (AT&amp;T):</b> B2(1900), B4(AWS1700), B12(700)				
Frequency Band (MHz )	<b>4G (T-Mobile):</b> B2(1900), B4(AWS1700), B5(850), B66(AWS-3 1700)				
	<b>4G (Verizon):</b> B4(AWS1700), B13(700)				
	<b>4G LTE FDD (APAC):</b> B1(2100), B18(800), B19(850), B26(850), B28(700)				
	<b>4G LTE FDD Bands:</b> B25(1900), B27(800)				
SMS	Mobile Originate / Mobile Terminated / Point-to-Point				
Serial (-B01 Models)	RS-232 (UART Interface)				
JSB (-B03 Models)	2.0 high speed compatible				
CP/IP Functions	FTP, TCP, UDP				
onnectors					
Connectors (-B01 Models)	Antenna: 1 SMA (cellular) / Mini SIM (2FF); 1.8V & 3V RS-232: DE-9 (female) / Power: 2.5 mm miniature (screw-on)				
Connectors (-B03 Models)	Antenna: 1 SMA (cellular) / Mini SIM (2FF); 1.8V & 3V USB: Type B mini-USB / Power: Type B mini-USB				
nysical Description					
Dimensions	3.17" x 2.45" x 1.16" (8.05 cm x 6.22 cm x 2.95 cm)				
Veight	0.65 lbs (0.295 kg)				
hassis	Aluminum				
ower Requirements					
nput Power (-B01 Models)	5 - 32 VDC				
Power Draw (-B01 Models) Serial Models @ 9VDC	Sleep Mode: 8 mA / Idle: 24 mA Max Power: 191 mA (average)				
ow Power Mode (-B01 Models)	Yes				
nput Power (-B03 Models)	5 VDC				
ower Draw (-B03 Models) ISB Models @ 5VDC	Sleep Mode: N/A / Idle: 26 mA Max Power: 325 mA (average)				
Environmental					
Operating Temperature***	-40° to +185° F / (-40° to +85° C)				
Storage Temperature	-40° to +185° F / (-40° to +85° C)				
Relative Humidity	20% - 90% RH non-condensing				
Certifications					
MC and Radio Compliance	CE, FCC, IC, RCM, UKCA				
Safety Compliance	UL/cUL/IEC 62368-1 / UL/cUL/IEC 60950-1				
Network Compliance	PTCRB				
Network Operator	AT&T, Verizon, T-Mobile				
Quality	MIL-STD-810G: High Temp, Low Temp, Cold Dwell, Random Vibration and Sine Vibration SAE J1455: Random Vibration and Sine Vibration				
Warranty	2-Years / www.multitech.com/legal/warranty				

<sup>\*</sup>See device guides or AT command guides for additional information.

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

†All future end-user (OEM) devices will and must go through FirstNet certification prior to being included in the FirstNet device ecosystem.

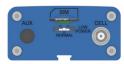
#### **HIGHLIGHTS**

#### **Applications**

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.

## Power Saving Mode

MultiConnect Cell 100 Series cellular modems with a



serial interface (-B01 models) offer a low power mode (sleep or power save mode). The Power Save Switch located below the SIM card connector on the device can be set to NORMAL or LOW POWER. The low power mode is intended for battery or solar-powered IoT applications such as outdoor remote sensors. The device user guide lists additional techniques for setting the device into low power mode.

## **MultiTech Connection Manager**

A software solution designed to greatly simplify and ease the installation, configuration and management of cellular connectivity in MultiTech USB and serial cellular modems that lack intelligence to manage these functions. Connection Manager ensures that IoT edge applications using cellular backhaul can always communicate to the Internet whenever needed by ensuring the cellular connection is always ready for transmission, ensuring the smooth operation of real-world IoT use cases. AT Commands, traditionally used to manage these functions, can prove time-consuming and difficult to the un-initiated.

Connection
Manager provides
a much easier and
faster method of
managing USB
and serial cellular
modems to
ensure persistent
connectivity to
the cellular
network.

Main S	ettings Connection	Details	Terrinal	Charts
Statistics			Connected	
Download	0 B/s		100	
Uplead:	0 8/s		alli	
Sent	10.19 Kb		70%	
Received:	5.86 Kb			

#### ORDERING INFORMATION

#### MultiConnect® Cell 100 Series

Model Category & Number	Description	Region*	Accessory Kit**	
Serial Models (-B01	Models)			
MTC-L4G2D-B01	LTE Cat 4 Cellular Modem, RS-232 interface. Accessories sold separately	Global	-	
MTC-L4G2D-B01-WW	LTE Cat 4 Cellular Modem, RS-232 interface with accessories.	Global	1	
MTC-LNA4-B01	LTE Cat 4 Cellular Modem, RS-232 interface. Accessories sold separately. (AT&T/Verizon)	Canada/ United States	-	
MTC-LNA4-B01-US	A4-B01-US LTE Cat 4 Cellular Modem, RS-232 interface with accessories. (AT&T/Verizon)			
MTC-LEU4-B01	LTE Cat 4 Cellular Modem, RS-232 interface. Accessories sold separately.	European Union/ United Kingdom	-	
MTC-LEU4-B01-EU-GB	J4-B01-EU-GB LTE Cat 4 Cellular Modem, RS-232 interface with accessories.			
MTC-MNG6-B01	LTE Cat M1 Cellular Modem, RS-232 interface. Accessories sold separately.	Global	-	
MTC-MNG6-B01-WW	LTE Cat M1 Cellular Modem, RS-232 interface with accessories.	Global	4	
USB Models (-B03	Models)			
MTC-L4G2D-B03	LTE Cat 4 Cellular Modem, USB interface with USB cable	Global	2	
MTC-L4G2D-B03-KIT	LTE Cat 4 Cellular Modem, USB interface with accessories	Global	3	
MTC-LNA4-B03	LTE Cat 4 Cellular Modem, USB interface with USB cable (AT&T/Verizon)	Canada/ United States	2	
MTC-LNA4-B03-KIT	NA4-B03-KIT LTE Cat 4 Cellular Modem, USB interface with accessories (AT&T/Verizon)		3	
MTC-LEU4-B03	BO3 LTE Cat 4 Cellular Modem, USB interface with USB Cable		2	
MTC-LEU4-B03-KIT	LTE Cat 4 Cellular Modem, USB interface with accessories	European Union/ United Kingdom	3	
MTC-MNG6-B03	LTE Cat M1 Cellular Modem, USB interface with USB cable	Global	2	
MTC-MNG6-B03-KIT	LTE Cat M1 Cellular Modem, USB interface with accessories	Global	5	

#### **Accessory Kit Specifics**

Accessory kits differ by model number.

Accessory & Kit Number	1	2	3	4	5	6	7	8
Cellular Antenna(s)	(2)		(2)	(1)	(1)	(1)	(2)	(2)
Power Supply	(1)			(1)		(1)	(1)	(1)
Power Blade(s)	(4) AU/NZ, EU, GB, US			(4) AU/NZ, EU, GB, US		(1) US	(1) US	(2) EU, GB
DE9M-DE9F Serial Cable	(1)			(1)		(1)	(1)	(1)
USB Cable		(1)	(1)		(1)			

Go to 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.

Trademarks and Registered Trademarks: MultiTech and the MultiTech logo, MultiConnect: Multi-Tech Systems, Inc. All other products and technologies are the trademarks or registered trademarks of their respective holders.

2025-01 • 86002164 • © 2025 Multi-Tech Systems, Inc. All rights reserved.

## **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: multitech.com/product-support/

#### **World Headquarters**

Multi-Tech Systems, Inc. 2205 Woodale Drive Mounds View, MN 55112 USA Tel: +1 763-785-3500 Email: sales@multitech.com www.multitech.com



# **Mouser Electronics**

**Authorized Distributor** 

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

# MultiTech:

 MTC-G3-B06
 MTC-G3-B06-EU-GB
 MTC-G3-B08-KIT
 MTC-H5-B01
 MTC-MNA1-B01
 MTC-MNA1-B01-US
 MTC-MNA1-B01-US
 MTC-LVW2-B01
 MTC-LVW2-B01
 MTC-LVW2-B01-US

 MTC-LVW2-B02
 MTC-LVW2-B02-US
 MTC-LAT1-B02-US
 MTC-LAT1-B03
 MTC-LAT1-B03-KIT
 MTC-LEU4-B01-EU-B01-EU-B03-KIT

 GB
 MTC-LEU4-B03-KIT
 MTC-LAT1-B01
 MTC-H5-B01-US-EU-GB
 MTC-H5-B03
 MTC-H5-B03-KIT
 MTC-LAT1-B01

 MTC-LAT1-B01-US
 MTC-LAT1-B02
 MTC-LEU4-B03
 MTC-LEU4-B03
 MTC-LEU4-B03