MULTITECH®

Anterix

MultiConnect® 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

multitech.com/cell100

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)	**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) **4G LTE FDD Bands:** B25(1900)	**4G LTE FDD (AT&T):** B2(1900), B4(AWS1700), B12(700) **4G LTE FDD (Verizon):** B4(AWS1700), B13(700) **3G (AT&T):** B2(1900), B4(AWS1700), B5(850) **4G LTE FDD Bands:** B5(850)	**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)
SMS	Mobile Originate / Mobile Terminated / Point-to-Point	Mobile Originate / Mobile Terminated / Point-to-Point ***	Mobile Originate / Mobile Terminated / Point-to-Point
Serial (-B01 Models)	RS-232 (UART Interface)		
USB (-B03 Models)	2.0 high speed compatible QMI compliant	2.0 high speed compatible CDC-ACM compliant	
TCP/IP Functions	FTP, SMTP, TCP, UDP	FTP, SMTP, SSL, TCP, UDP	
Connectors			
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)		
Connectors (-B03 Models)	Antenna: 2 SMA (cellular, auxiliary) Mini SIM (2FF); 1.8V & 3V USB: Type B mini-USB Power: Type B mini-USB		
Physical Description			
Dimensions	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	Aluminum		
Power Requirements			
Input Power (-B01 Models)	7 - 32 VDC	5 - 32 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		
Network Compliance	PTCRB		N/A
Network Operator	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		
Warranty	2-Years / www.multitech.com/legal/warranty		

* 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
Regions	Australia Canada European Union United Kingdom United States
Performance**	3GPP Release 14 4G LTE FDD Cat M1 M1: 588 Kbps peak downlink 1 Mbps peak uplink 2G: 264 Kbps peak downlink 210 Kbps peak uplink
Frequency Band (MHz)	**4G LTE FDD (Europe):** B1(2100), B3(1800), B8(900), B20(800) **2G (Europe Fallback):** B2(1900), B3(1800), B5(850), B8(900) **4G (AT&T):** B2(1900), B4(AWS1700), B12(700) **4G (T-Mobile):** B2(1900), B4(AWS1700), B5(850), B66(AWS-3 1700) **4G (Verizon):** B4(AWS1700), B13(700) **4G LTE FDD (APAC):** B1(2100), B18(800), B19(850), B26(850), B28(700) **4G LTE FDD Bands:** B25(1900), B27(800)
SMS	Mobile Originate / Mobile Terminated / Point-to-Point
Serial (-B01 Models)	RS-232 (UART Interface)
USB (-B03 Models)	2.0 high speed compatible
TCP/IP Functions	FTP, TCP, UDP
Connectors	
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
Physical Description	
Dimensions	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	Aluminum
Power Requirements	
Input 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)
Low Power Mode (-B01 Models)	Yes
Input Power (-B03 Models)	5 VDC
Power Draw (-B03 Models) USB 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	
EMC 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

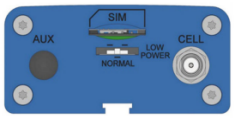
* See device guides or AT command guides for additional information.
** Actual performance speeds may be affected by a variety of attributes such as cell tower distance, data loads, packet sizes, etc.
*** Device has been tested up to +85° C. UL Recognized @ 40° C, limited by AC power supply. UL Recognized @ 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.

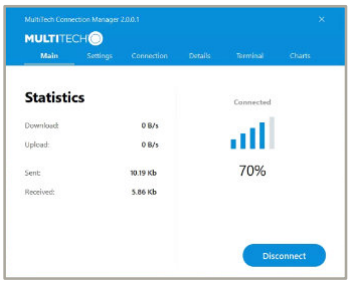
Power Saving Mode



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.



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	LTE Cat 4 Cellular Modem, RS-232 interface with accessories. (AT&T/Verizon)	Canada/ United States	7
MTC-LEU4-B01	LTE Cat 4 Cellular Modem, RS-232 interface. Accessories sold separately.	European Union/ United Kingdom	–
MTC-LEU4-B01-EU-GB	LTE Cat 4 Cellular Modem, RS-232 interface with accessories.	European Union/ United Kingdom	8
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	LTE Cat 4 Cellular Modem, USB interface with accessories (AT&T/Verizon)	Canada/ United States	3
MTC-LEU4-B03	LTE Cat 4 Cellular Modem, USB interface with USB Cable	European Union/ United Kingdom	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

(*) Global = Australia, Canada, European Union, New Zealand, United Kingdom, United States
(**) All models include a mounting tab and quick start guide.

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.

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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.

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/

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