MULTITECH®

CREATE • CONNECT • COMMUNICATE

MultiConnect® rCell 100 Series

Cellular Routers now supporting LTE Cat 4, Cat M1 & NB-IoT

mPower EDGE INTELLIGENCE

DeviceHQ®

BENEFITS

- Lowest total cost of ownership
- Long and stable lifecycles
- Certified and carrier approved

FEATURES

- 4G (Cat 4, Cat M1 & NB-IoT), 3G and 2G models
- Optional GPS & Wi-Fi/BT capabilities
- Flexible Web API for developers based on RESTful JSON over HTTPs
- Ruggedized enclosure
- Designed, manufactured and tested in ISO 13485 facilities
- Remotely hosted device management platform
- mPower Edge Intelligence embedded software

MultiConnect® rCell 100 Series of industrial cellular routers, optimized for secure M2M (machine-to-machine)/Internet of Things (IoT) applications, with mPower™ Edge Intelligence embedded software, offering a robust Ethernet or serial network interface platform ready to deploy. The intuitive user interface and cloud device management allows for quick configuration and over-the-air upgrades. Enhanced with features such as WAN failover, secure software updates, advanced firewall and routing configuration, and Certificate Management, the MultiConnect rCell 100 Series creates an ideal environment for secure and redundant communications critical to the reliability of remote monitoring systems in a variety of industries.
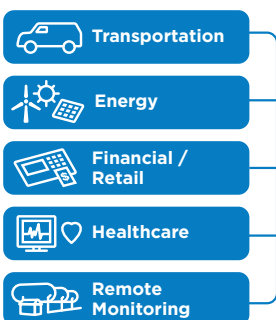
Your Devices & Data

- Transportation
- Energy
- Financial / Retail
- Healthcare
- Remote Monitoring

Send + Receive

DeviceHQ®

Wireless Service Provider

Asset Management Platform

Insight + Action + Control

- Real-Time Management
- Alerts — Email, SMS
- Reports

www.multitech.com/rcell100

HARDWARE SPECIFICATIONS

Models	MTR-LNA7	MTR-LEU7
Cellular Radio	MTQ-LNA7-B02	MTQ-LEU7-B02
Cellular Perfomance	4G - LTE Category 4	
Cellular Fallback	3G - HSPA+	3G - HSPA +, 2G - GPRS
Frequency Band (MHz)	4G: B2(1900), B4(AWS1700), B5(850), B12(700), B13(700) 3G: B2(1900), B4(AWS1700), B5(850)	4G: B1(2100), B3(1800), B7(2600), B8(900), B20(800), B28A(700) 3G: B1(2100), B8(900) 2G: B3(1800), B8(900)
Packet Data*	Up to 150 Mbps downlink / Up to 50 Mbps uplink	
SIM Card	(1) 3FF Micro SIM	
Diversity/MIMO	Rx Diversity and MIMO DL 2x2	
SMS	Point-to-Point Messaging, Mobile-Terminated SMS, Mobile-Originated SMS	
Input Voltage	7V to 32VDC	
LEDs	POWER, STATUS (Power Status), Wi-Fi, CD (Carrier Detect), LS (Link Status), SIGNAL (Signal Strength)	
Connectors		
Cellular	Female SMA	
Wi-Fi	Reverse polarity female SMA (Wi-Fi/BT Antenna)	
GPS	Female SMA	
SIM	Micro SIM (3FF); 1.8 and 3V	
LAN	RJ-45, 10/100 BaseT	
RS-232	DE9	
Power	2.5 mm miniature (screw-on)	
Physical Description		
Dimensions (L x W x H)	4.17″ x 3.0″ x 1.15″ (10.6 cm x 7.6 cm x 2.9 cm)	
Weight	0.51 lbs (0.231 Kg)	
Chassis Type	Anodized aluminum (blue)	
Environmental		
Operating Temperature†	-40° to +176° F (-40° to +80° C)	
Storage Temperature	-40° to +185° F (-40° to +85° C)	
Humidity	Relative humidity 15% to 93% noncondensing	
Certifications		
Regulatory	FCC Class B (US)	RED (EU Economic Area)
Safety	UL60950-1 (US), UL 201 (US)	IEC60950-1 (EU Economic Area)
Mobile Network Operator Approvals	PTCRB, AT&T, Bell, Telus, Verizon**	GCF, European Network Operators
Additional Mobile Network Operator Certifications Available (Contact MultiTech for Details)	US: T-Mobile Canada: Rogers	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.
** MTQ-LNA7-B02 is PTCRB, AT&T, Bell, Telus and Verizon approved
† 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

Embedded Software

mPower™ Edge Intelligence is an embedded software offering, building on its popular application enablement platform, to deliver programmability, network flexibility, enhanced security and manageability for scalable Industrial Internet of Things (IIoT) solutions.

Wi-Fi/Bluetooth Specifications

The Wi-Fi interface can be set up in 802.11 b\g\n Access Point (AP) or client mode. In AP mode, the router can support up to 5 client connections. The Bluetooth serial interface allows you to set up a transparent data pipe from a Bluetooth device to a remote server. The router can be configured using TCP or UDP protocols and supports client and server modes giving you the flexibility you need for your particular application. RFCOM and SPP profile support. Contact MultiTech about additional Bluetooth profile support.

Security 🔒

The MultiConnect rCell 100 Series of cellular routers use IPSec industry standard data encryption to provide high performance, secure LAN-to-LAN VPN connections with 3DES or AES encryption using IKE and PSK key management. Support for five concurrent VPN tunnels. Additionally a private, secure digital signature with integrity check update technique is now available, minimizing file damage, tampering or loading of invalid firmware. MultiTech signs and distributes firmware updates through a secure standard firmware distribution process and verifies the firmware signature before installation of the firmware for maximum device integrity.

Wi-Fi

• 802.11 b\g\n (1x1), 2.5GHz (20MHz BW)
• 11, 54 and 65 Mbps max theoretical throughput, for 802.11 b\g\n, respectively
• 20, 15 and 14.5 dBm output power, for 802.11 b\g\n, respectively
• WEP, WPA, and WPA2 support

Bluetooth

• Version 2.1+EDR   • Power Class 1.5   • Data rate 3 Mbps

HARDWARE SPECIFICATIONS

Models	MTR-MNG2	MTR-H6	MTR-H5	MTR-G3
Performance	LTE Cat M1 / NB-IoT Dual Mode + 2G Fallback	HSPA	HSPA+	GPRS Class 10
Frequency Band (MHz)	3GPP Rel. 13 4G: B1(2100)/B2(1900/ B3(1800)/B4(AWS1700)/ B5(850)/B8(900)/ B12(700)/B13(700)/ B18(800)/B19(800)/ B20(800)/B26(850)/ B28(700)/B39(1900) 2G: B2(1900)/B3(1800)/ B5(850)/B8(900)	3G: Tri-band 850/900/2100 2G: Quad-band 850/900/1800/1900	3G: WCDMA/HSDPA/ HSUPA 800/850/900/ AWS1700/1900/2100 2G: GSM/GPRS/EDGE 850/900/1800/1900	Quad-band 850/900/1800/1900
Packet Data*	Cat. M1: Up to 300 Kb/s Downlink Up to 375 Kb/s Uplink NB1: Up to 250 Kb/s Downlink (multi-tone) Up to 20 Kb/s Uplink (single-tone)	Up to 7.2 Mbps downlink, up to 5.76 Mbps uplink	Up to 21.0 Mbps downlink, up to 5.76 Mbps uplink	Up to 85.6K downlink Up to 85.6K uplink
Diversity/MIMO	N/A	No	Yes	No
SMS	Text & PDU, Point-to-Point	Point-to-Point Messaging, Mobile-Terminated SMS, Mobile-Originated SMS		
Input Voltage	7V to 32VDC			
Connectors				
Cellular	Female SMA			
Wi-Fi	Reverse polarity female SMA (Wi-Fi/BT Antenna)			N/A
GPS	Female SMA			
SIM	Mini SIM (2FF); 1.8 and 3V			
LAN	RJ-45, 10/100 BaseT			
RS-232	DE9			
Power	2.5 mm miniature (screw-on)			
Physical Description				
Dimensions (L x W x H)	4.17" x 3.0" x 1.15" (10.6 cm x 7.6 cm x 2.9 cm)			
Weight	0.51 lbs (0.231 Kg)			
Chassis Type	Anodized aluminum (blue)			
Environmental				
Operating Temperature†	-40° to +176° F (-40° to +80° C)	-40° to +185° F (-40° to +85° C)		
Storage Temperature	-40° to +185° F (-40° to +85° C)			
Humidity	Relative humidity 15% to 93% non-condensing			
Certifications				
Regulatory	RED (EU Economic Area)	RED (EU Economic Area), RCM (Australia/NZ)	FCC Class B (US), IC (Canada), RED (EU Economic Area), RCM (Australia/NZ)	RED (EU Economic Area)
Safety	IEC 60950-1 (EU Economic Area)	IEC60950-1 (EU Economic Area), AS/NZS 60950.1 (Australia/NZ)	UL60950-1 (US), UL 201(US), Class I Div 2 (US and Canada), cUL60950-1 (Canada), IEC60950-1 (EU Economic Area), AS/NZS 60950.1 (Australia/NZ)	IEC60950-1 (EU Economic Area)
Mobile Network Operator Approvals	US: PTCRB, AT&T, Verizon Europe: GCF, European Network Operators	GCF, Telstra, EU carriers	Australia: Telstra Canada: Bell, Telus** Europe: GCF, European Network Operators US: PTCRB, AT&T	EU carriers
Additional Mobile Network Operator Certifications Available (Contact MultiTech for Details)	US: T-Mobile Canada: Rogers, Telus, 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.
**MTR-H5-B07 is approved at Telus. MTR-H5-B10 is approved at Bell. Contact MultiTech for details.
† 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.

ORDERING INFORMATION

MultiConnect® rCell 100 Series 4G-LTE Models

Model	Description	Region
MTR-LNA7-B07	LTE Cat 4 Router with Fallback, without Accessories (AT&T/Verizon)	US/Canada
MTR-LNA7-B07-US	LTE Cat 4 Router with Fallback and US Accessory Kit (AT&T/Verizon)	US/Canada
MTR-LNA7-B10	LTE Cat 4 Router with Fallback and Wi-Fi/BT/GPS, without Accessories (AT&T/Verizon)	US/Canada
MTR-LNA7-B10-US	LTE Cat 4 Router with Fallback and Wi-Fi/BT/GPS, with US Accessory Kit (AT&T/Verizon)	US/Canada
MTR-LEU7-B07	LTE Cat 4 Router with Fallback, without Accessories (Europe)	Europe/GB
MTR-LEU7-B07-EU-GB	LTE Cat 4 Router with Fallback and EU/UK Accessory Kit (Europe)	Europe/GB
MTR-LEU7-B10	LTE Cat 4 Router with Fallback and Wi-Fi/BT/GPS, without Accessories (Europe)	Europe/GB
MTR-LEU7-B10-EU-GB	LTE Cat 4 Router with Fallback and Wi-Fi/BT/GPS, with EU/UK Accessory Kit (Europe)	Europe/GB
MTR-MNG2-B07	LTE Cat M1+NB-IoT Router w/Fallback, w/o Accessory Kit	Global
MTR-MNG2-B07-WW	LTE Cat M1+NB-IoT Router w/Fallback, w Accessory Kit	Global
MTR-MNG2-B10	LTE Cat M1+NB-IoT Router w/Wi-Fi/BT/GPS & Fallback, w/o Accessory Kit	Global
MTR-MNG2-B10-WW	LTE Cat M1+NB-IoT Router w/Wi-Fi/BT/GPS & Fallback, w/ Accessory Kit	Global

MultiConnect® rCell 100 Series HSPA+ Models

Model	Description	Region
MTR-H5-B07	HSPA+ Router w/o Accessories	Global
MTR-H5-B07-US-EU-GB	HSPA+ Router w/US/EU/UK Accessory Kit	US/Euro/UK
MTR-H5-B08	HSPA+ Router w/GPS w/o Accessories	Global
MTR-H5-B08-US-EU-GB	HSPA+ Router w/GPS & US/EU/UK Accessory Kit	US/Euro/UK
MTR-H5-B09	HSPA+ Router w/Wi-Fi w/o Accessories	Global
MTR-H5-B09-US-EU-GB	HSPA+ Router w/Wi-Fi & US/EU/UK Accessory Kit	US/Euro/UK
MTR-H5-B10	HSPA+ Router w/Wi-Fi/GPS w/o Accessories	Global
MTR-H5-B10-US	HSPA+ Router w/Wi-Fi/GPS & US Accessory Kit	US/Canada

MultiConnect® rCell 100 Series HSPA Models for Europe

Model	Description	Region
MTR-H6-B16	HSPA Router w/o Accessories	Euro/GB
MTR-H6-B16-EU	HSPA Router w/EU Accessory Kit	EMEA
MTR-H6-B16-GB	HSPA Router w/UK Accessory Kit	GB/IE
MTR-H6-B18	HSPA Router w/Wi-Fi w/o Accessories	Euro/GB
MTR-H6-B18-EU	HSPA Router w/Wi-Fi & EU Accessory Kit	EMEA
MTR-H6-B18-GB	HSPA Router w/Wi-Fi & UK Accessory Kit	GB/IE
MTR-H6-B19	HSPA Router w/Wi-Fi/GPS w/o Accessories	Euro/GB

MultiConnect® rCell 100 Series GPRS Models for Europe

Model	Description	Region
MTR-G3-B16	GPRS Router w/o Accessories	Euro/GB
MTR-G3-B16-EU-GB	GPRS Router w/EU/UK Accessory Kit	EMEA

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.

MULTITECH

PulseSupply
pulsesupply.com