MultiConnect® rCell 100 Series

MultiTech® Systems

Intelligent Wireless Routers

The MultiConnect® rCell intelligent wireless routers are a part of Multi-Tech's comprehensive line of routers for M2M (machine-to-machine) communications. Designed for any application, it provides functionality that maximizes the user experience and the assurance in knowing your router is going to perform as specified – as well as withstand the rigors of your application. The MultiConnect rCell also offers a stable lifecycle, an important consideration for M2M solutions.
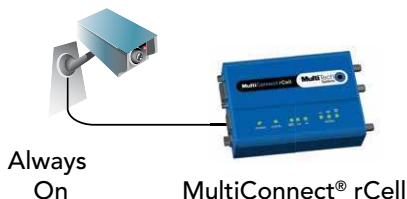
Features

- 3G and 2G models available
- GSM and CDMA models available
- Models with GPS tracking connectivity
- Models with Wi-Fi®/Bluetooth® connectivity
- Ethernet and Serial connectors
- Fully certified
- Carrier approved
- Two-year warranty

Benefits

- Quick deployments to shorten time to market
- Long and stable life cycles
- Certified and Carrier approved

Cellular Network

Ethernet Surveillance Camera

Always On

MultiConnect® rCell

Internet Gateways

INTERNET

Central Monitoring Location

M2M Simplified.™ Innovative Designs, Innovative Solutions.

Specifications

Model	MTR-H6	MTR-C2
Performance	HSPA	1xRTT
Frequency Band	3G: Tri Band 850/900/2100 MHz 2G: Quad Band 850/900/1800/1900 MHz	Dual band 800/1900 MHz
Packet Data*	Up to 7.2 Mbps downlink / 5.76 Mbps uplink	Up to 153.6 Kbps forward and reverse
Circuit Switched Data	Not Supported	
SMS	Point-to-Point Messaging, Mobile-Terminated SMS, Mobile-Originated SMS	
Voltage	7V to 32V DC	
Connectors		
RF Antenna	50 ohm SMA (female connector)	
Wi-Fi	Reverse polarity female SMA	
GPS	50 ohm SMA (female connector)	
SIM	Standard 1.8 and 3V SIM receptacle	N/A
LAN	RJ-45, 10/100 BaseT	
RS-232	DE9	
Power	2.5 mm miniature (screw-on)	
Physical Description		
Physical 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)	
Physical Weight	0.51 lbs (0.231 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		
EMC Compliance	EN55022 Class B, EN55024	FCC Part 15
Radio Compliance	EN301 489-1, EN489-3 (GPS models only), EN301 489-7, EN301 511	FCC Part 22, 24
Safety	UL60950-1, IEC60950-1	UL60950-1, cUL60950-1, IEC60950-1
Network	GCF Certified Module	Aeris, Sprint, Verizon

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

** **UL Listed @ 40° C,** limited by power supply. UL Certification does not apply or extend to an ambient above 40° C and has not been evaluated by UL **for ambient greater th**at 40° C. "UL has evaluated this device for use in ordinary locations only. Installation in a vehicle or other outdoor locations has not **been evaluated by UL.** UL Certification does not apply or extend to use in vehicles or outdoor applications or in ambient above 40° C." (Note applicable to **models that include** power supply only)

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 can act as a server or client, giving you the flexibility you need for your particular application.

Wi-Fi
- 802.11 b\g\n (1x1)
- WEP, WPA, and WPA2 support
- 65 Mbps maximum theoretical throughput

Bluetooth
- Version 4.0
- Power Class 1.5
- 8 dBm TPO (typical)

Highlights

Applications

The MultiConnect rCell intelligent wireless routers can be used in a variety of applications, from asset tracking and fleet management to highly data-intensive, mission critical applications, such as remote video surveillance or home medical monitoring. Because the routers are certified and carrier approved, customers are able to quickly enable M2M functionality, as they do not have to incur the expense and take the time to obtain the appropriate certifications and approvals.

Secure VPN Connections

The MultiConnect rCell intelligent wireless router uses the IPSec industry standard protocol, data encryption, and the Internet to provide high performance, secure VPN connections. For LAN-to-LAN connectivity, the MultiConnect rCell utilizes the IPSec protocol to provide tunnels with strong 3DES or AES encryption using IKE and PSK key management. With support for two concurrent VPN tunnels, it is sized appropriately for M2M applications.

Embedded OS for Enhanced M2M Connectivity

Multi-Tech's embedded operating system provides a web-based programming interface providing easy access to many of the advanced features offered by the MultiConnect rCell. For example, the router can be configured for one of three connectivity modes:

- Always on – When powered on, the router automatically establishes a connection to the wireless network and will re-establish the data link if the connection is lost.
- Wake-up on ring/Caller ID – This setting allows the router to establish a data link when the router detects any incoming ring or when the router detects an incoming ring based on a particular caller ID number.
- Dial-on demand – When the router is configured for dial-on demand, it will establish a data link when LAN activity is detected.

Ordering Information

GSM Products

Product	Description	Bundle Available	Available Build Options	Region
MTR-H6-Bxx	Intelligent HSPA Router	Yes	B16, B18, B19	Europe

CDMA Products

Product	Description	Bundle Available	Available Build Options	Region
MTR-C2-Bxx-Nx	1xRTT Cellular Modem	Yes	B16, B17	US

Bundle Ordering Codes

Bundles include the following:

-US	Includes US style power plug, power supply, antenna, and Ethernet cable
-EU	Includes Euro style power plug, power supply, antenna, and Ethernet cable
-GB	Includes UK style power plug, power supply, antenna, and Ethernet cable

Carrier Ordering Codes (CDMA models only)

Nx signifies the specific Carrier that the product is approved for.

-N2	For Sprint Networks (USA)
-N3	For Verizon Wireless Networks (USA)
-N16	For Aeris Communications Networks (USA)

Build Options

	1 Ethernet Port	4 Ethernet Port	RS232/422/485 Serial	RS232 Serial	USB	Wi-Fi/Bluetooth	AC/DC Power	Power over Ethernet	GPS	Diversity
-B07	X			X			X			X
-B08	X			X			X		X	X
-B09	X			X	X		X			X
-B10	X			X	X		X		X	X
-B16	X			X			X			
-B17	X			X			X		X	
-B18	X			X	X		X			
-B19	X			X	X		X		X	

Use ordering codes for specific build options. Go to www.multitech.com for detailed product model numbers.

Services & Warranty

Multi-Tech'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. Products include a 2-year warranty that can be extended up to 5 years via Multi-Tech's Extended Warranty program, which offers the convenience of Overnight Service* for optimal uptime.

Extended Warranty & Overnight Services

To give you peace-of-mind and protect your investment, our Extended Warranty Service Plans ensure your Multi-Tech products are covered for 1, 2, or 3 years beyond the manufacturer's warranty with an optional Overnight Service plan*.

Installation Support

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

Technical Support Services

At Multi-Tech, 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 Multi-Tech representative or visit www.multitech.com/support.go.

*Overnight replacement service is currently available for U.S. customers.

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