# MultiConnect® rCell 100 Series MultiTech®



Multi Tech

## **Cellular Routers**

The MultiConnect® rCell 100 Series of cellular routers are a part of Multi-Tech's comprehensive portfolio of cellular connectivity products optimized for M2M (machine-to-machine) communications. With the Industry's most cost effective approach to Cloud-based remote device management

and shared design approach across multiple cellular technologies, it provides the lowest total cost of ownership to our customers. The MultiConnect rCell 100 Series of cellular routers also offers a long, stable lifecycle, an important consideration for M2M solutions.

## **Features**

- Remote device management
- · 3G and 2G models available
- · HSPA+, EV-DO, 1xRTT and GPRS
- · Ethernet and Serial interfaces
- Supports IPSec VPN tunnels for secure LAN-to-LAN access
- IP Passthrough
- API
- · Models with GPS connectivity
- · Models with Wi-Fi®/Bluetooth® connectivity
- Rugged, military and SAE tested
- Carrier approved
- Two-year warranty



## **Benefits**

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









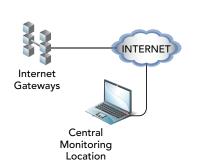
Traffic Sign





Cellular Network

MultiConnect rCell





## **Specifications**

Model	MTR-H5	MTR-H6		
Performance	HSPA+	HSPA		
Frequency Band	3G: Hepta-band 800/850/900/AWS 1700/1900/2100 MHz 2G: Quad-band 850/900/1800/1900 MHz	3G: Tri-band 850/900/2100 MHz 2G: Quad-band 850/900/1800/1900 MHz		
Packet Data*	Up to 21.0 Mbps downlink Up to 5.76 Mbps uplink	Up to 7.2 Mbps downlink Up to 5.76 Mbps uplink		
Diversity	Yes	No		
SMS	Point-to-Point Messaging, Mobile-Terr	ninated SMS, Mobile-Originated SMS		
Voltage	7V to 3	2V DC		
Connectors				
Cellular	Female	e SMA		
Wi-Fi	Reverse polarit	ry female SMA		
GPS	Female	e SMA		
SIM	Mini	SIM		
LAN	RJ-45, 10/	100 BaseT		
RS-232	DE9			
Power	2.5 mm miniat	ure (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			
Storage Temperature	-40° to +185° F (-40° to +85° C)			
Humidity	Relative humidity 15% t	to 93% noncondensing		
Certifications				
Regulatory	FCC Class B (US), IC (Canada), R&TTE (EU Economic Area), A-Tick (Australia/NZ)	R&TTE (EU Economic Area), A-Tick (Australia/NZ)		
Safety	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), AS/NZS 60950.1 (Australia/NZ)		
Network	PTCRB, GCF approved module, AT&T, T-Mobile, Telstra, EU carriers Pending: Rogers, Bell, Telus	Telstra, EU carriers		
	MIL-STD-810: High Temp, Low Temp, Cold Dwell, Random Vibration and Sine Vibration SAE J1455: Random Vibration and Sine Vibration			

# 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 Multi-Tech about additional Bluetooth profile support today.

## Wi-Fi

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

## Bluetooth

- Version 4.0
- Power Class 1.5

# **Specifications**

Model	MTR-EV3 (Coming Soon)	MTR-G3 (Coming Soon)	MTR-C2	
Performance	EV-DO	GPRS Class 10	1xRTT	
Frequency Band	Dual-band 800/1900 MHz	Quad-band 850/900/1800/1900 MHz	Dual-band 800/1 <b>900 MHz</b>	
Packet Data*	Up to 3.1 Mbps downlink Up to 1.8 Mbps uplink	Up to 85.6K downlink Up to 85.6K uplink	Up to 153.6K downlink Up to 153.6K uplink	
Diversity	Yes	No	No	
SMS	Point-to-Point Me	ssaging, Mobile-Terminated SMS, Mobile-G	Originated SMS	
Voltage		7V to 32V DC		
Connectors				
Cellular		Female SMA		
Wi-Fi		Reverse polarity female SMA		
GPS		Female SMA		
SIM	N/A	Mini SIM	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	7" x 3.0" x 1.15" (10.6 cm x 7.6 cm x 2.9 cn	n)	
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				
Regulatory	FCC Class B (US)	R&TTE (EU Economic Area)	FCC Class B (US)	
Safety	UL60950-1 (US), UL 201 (US), Class I Div 2 (US and Canada)	IEC60950-1 (EU Economic Area)	UL60950-1 (US), UL <b>201 (US)</b> , Class I Div 2 (US and Canada)	
Network	Pending: Verizon, Sprint, Aeris	EU carriers	Verizon Pending: Sprint, <b>Aeris</b>	
Quality	MIL-STD-810: High Temp, Low Temp, Cold Dwell, Random Vibration and Sine Vibration SAE J1455: Random Vibration and Sine Vibration			

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

# **Highlights**

## **Applications**

The MultiConnect rCell 100 Series of cellular routers can be used in a wide variety of applications such as digital signage, smart vending, smart energy or home medical monitoring. Because the routers are certified and carrier approved, customers are able to quickly deploy with cellular connectivity to realize new revenue streams, Opex reduction or improved service offering.

## 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.

<sup>\*\*</sup> 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 that 40° C. "UL has evaluated this device for use in ordinary locations only. Installation in outdoor locations has not been evaluated by UL. UL Certification does not apply or extend to outdoor applications in ambient above 40° C." (Note applicable to models that include power supply only)

## **Highlights**

## **M2M Focused Software Features**

- Remote device management simplifies and scales the management of geographically dispersed devices. Monitor, upgrade and configure devices from a single location resulting in lower total cost of ownership and increased operational efficiency.
- Persistent connectivity options that automatically manage the cellular connection so the connection is available when it's needed most
- DDNS support for inbound connectivity
- Flexible Serial-to-IP configurations with client and server modes to support any communication architecture

- Flexible GPS configuration allows GPS data to be sent serially or via TCP/UDP protocols in client or server modes
- API (RESTful JSON over HTTPs) for managing all configurations and features of the device enabling integration into external applications
- Bridges serial Modbus traffic to Modbus TCP with support for client and server modes

## **Ordering Information**

## **GSM Products**

Product	Description	Bundle Available	Available Build Options	Region
MTR-H5-Bxx	HSPA+ Cellular Router	Yes*	B07, B08, B09, B10	Global
MTR-H6-Bxx	HSPA Cellular Router	Yes*	B16, B18, B19	Regional
MTR-G3-Bxx	GPRS Cellular Router	Yes*	B16	Regional

<sup>\*</sup> Bundles include the following.

## Ordering Codes

-US	Includes US style power supply, antenna(s), and Ethernet cables	
-EU	Includes Euro style power supply, antenna(s), and Ethernet cables	
-GB	Includes UK style power supply, antenna(s), and Ethernet cables	

#### **CDMA Products**

Product	Description	Bundle Available	Available Build Options	Region
MTR-EV3-Bxx-Nx**	EV-DO Cellular Router	Yes*	B07, B08, B09, B10	US
MTR-C2-Bxx-Nx**	1xRTT Cellular Router	Yes*	B16, B17	US

<sup>\*</sup> Bundles include the following.

#### **Ordering Codes**

-US Includes US style power supply, antenna(s), and Ethernet cables

## Ordering Codes

-N2	For Sprint Networks	
-N3	For Verizon Wireless Networks	
-N16	For Aeris Communications Networks	

	1 Ethernet Port	RS-232 Serial	Wi-Fi/Bluetooth	GPS	Diversity
B07	X	X			Х
B08	X	X		Χ	X
B09	X	X	X		X
B10	X	X	X	Χ	X
B16	X	X			
B17	X	X		Χ	
B18	X	X	X		
B19	X	X	X	Χ	

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.

## World Headquarters

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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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<sup>\*\*</sup> Nx signifies the specific Carrier that the product is approved for