

# MultiConnect® rCell 100 Series



## Cellular Routers Designed for Europe

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 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

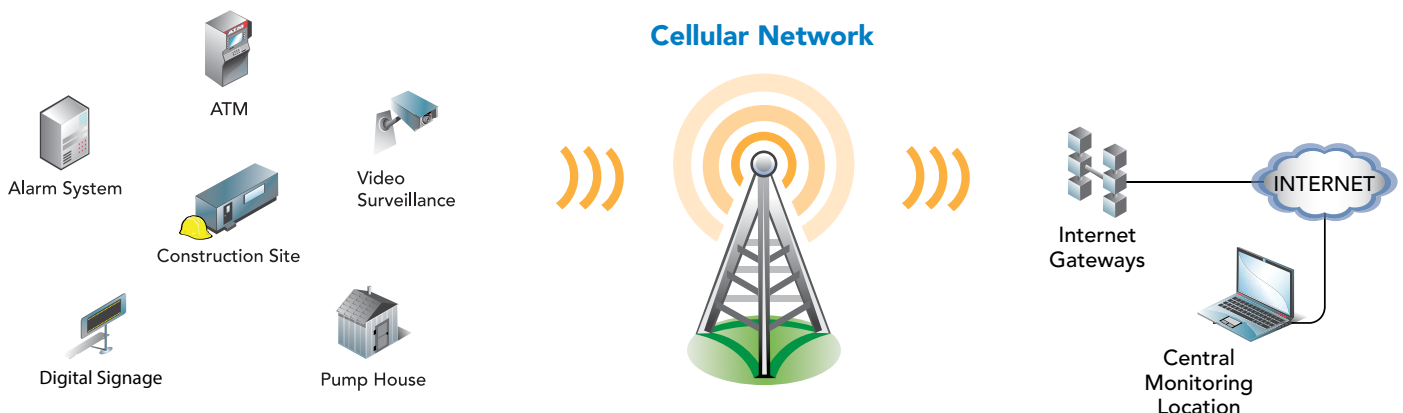
- Remote device management
- 3G and 2G models available
- Ethernet and Serial interfaces
- Supports IPSec VPN tunnels for secure LAN-to-LAN access
- IP Passthrough
- API
- Models with GPS connectivity
- Models with Wi-Fi®/Bluetooth® connectivity
- Rugged, military and SAE tested
- Fully certified
- Two-year warranty, upgradable to five years



### Benefits

- Lowest total cost of ownership
- Long and stable lifecycles
- Fully certified

### Cellular Network



## Specifications

Model	MTR-H6	MTR-G3
Performance	HSPA	GPRS Class 10
Frequency Band	3G: Tri-band 850/900/2100 MHz 2G: Quad-band 850/900/1800/1900 MHz	Quad-band 850/900/1800/1900 MHz
Packet Data*	Up to 7.2 Mbps downlink Up to 5.76 Mbps uplink	Up to 85.6K downlink Up to 85.6K uplink
SMS	Point-to-Point Messaging, Mobile-Terminated SMS, Mobile-Originated SMS	
Voltage	7V to 32VDC	
Connectors		
Cellular	Female SMA	
Wi-Fi	Reverse polarity female SMA	
GPS	Female SMA	
SIM	Mini SIM; 1.8 and 3V	
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 <sup>†</sup>	-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	R&TTE (EU Economic Area), A-Tick (Australia/NZ)	R&TTE (EU Economic Area)
Safety	IEC60950-1 (EU Economic Area), AS/NZS 60950.1 (Australia/NZ)	IEC60950-1 (EU Economic Area)
Network	Telstra, EU carriers	EU carriers
Quality	MIL-STD-810: High Temp, Low Temp, Cold Dwell, Random Vibration and Sine Vibration SAE J1455: Random Vibration and Sine Vibration	
GPS Specifications		
Accuracy	Position 2.5m CEP, Velocity 0.1 m/sec	N/A
Open Sky TTFF	Hot start 1 second, Cold start 29 seconds, Reacquisition <1s	N/A
Sensitivity Tracking	-161 dBm	N/A
Protocol	NMEA-0183, V3.01, GGA, GLL, GSA, GSV, RMC, VTG	N/A

\* 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.

## 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
- 65 Mbps maximum theoretical throughput

### Bluetooth

- Version 2.1+EDR
- Power Class 1.5

## 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.

### 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

### HSPA & GPRS Products

Model	Description	Bundle Available	Region
MTR-H6-B16-xx	HSPA Cellular Router	Yes	Regional
MTR-H6-B18-xx	HSPA Cellular Router with Wi-Fi/Bluetooth	Yes	Regional
MTR-H6-B19	HSPA Cellular Router with GPS/Wi-Fi/Bluetooth	No	Regional
MTR-G3-B16-xx	GPRS Cellular Router	Yes	Regional

### -xx Ordering Codes

Blank	Device only, no accessories
-EU	Includes Euro style power supply, antenna(s), and Ethernet cable (MTR-H6 models only)
-GB	Includes UK style power supply, antenna(s), and Ethernet cable (MTR-H6 models only)
-EU-GB	Includes Euro and UK style power supply, antenna(s), and Ethernet cable (MTR-G3 model only)

Use ordering codes for specific build options. Go to [www.multitech.com](http://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.

### Extended Warranty

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.

### 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](http://www.multitech.com/support.go).

### World Headquarters

Multi-Tech Systems, Inc.  
2205 Woodale Drive  
Mounds View, MN 55112 U.S.A.  
Tel: 763-785-3500  
Toll-Free: 800-328-9717  
Email: [sales@multitech.com](mailto:sales@multitech.com)  
[www.multitech.com](http://www.multitech.com)

### EMEA Headquarters

Multi-Tech Systems (EMEA)  
United Kingdom  
Tel: +(44) 118 959 7774  
Email: [sales@multitech.co.uk](mailto:sales@multitech.co.uk)