About the rCell 300 Industrial Cellular Router

The MultiTech rCell 300 router is both an industrial router and a specialized network device designed to connect internet-of-things (IoT) devices. The rCell 300 provides enhanced security to protect against cyber threats, includes edge intelligence to run local applications, and offers secure data communication between many types of devices that use legacy or the latest communication technologies. The rCell 300 can be remotely managed via MultiTech Device Manager.



Intended Use

The rCell 300 is designed for a variety of industrial and IoT applications. Some of its intended uses include:

- Remote monitoring and control: This device is ideal for remote monitoring and control of equipment and systems in industries such as oil and gas, utilities, and agriculture. The rCell 300 allows for real-time data collection and management of remote locations.
- Smart cities and infrastructure: This device can be used in smart-city applications, including traffic management, environmental monitoring, and electric vehicle charging stations.
- Industrial automation: This device works with current industrial automation equipment (such as RTU) for remote data collection, fault notifications, control/manage field equipment.

The rCell 300 can be used in applications that require equipment to operate in harsh environments. For outdoor deployments, the rCell 300 must be installed in a waterproof enclosure.

rCell 300 Ordering Options

Ordering Part Number	Description	Region
MTR3-L4G2D-AC00PA-EWM	LTE Cat 4 cellular router with fallback. Includes WiFi, GPS, and accessories. Accessory kit #1.	Australia Canada
MTR3-L4G2D-AC00QA-EWM	LTE Cat 4 cellular router with fallback. Includes GPS and accessories. Accessory kit #2.	European Union United Kingdom
MTR3-L4G2D-AC00PA-11M	LTE Cat 4 cellular router with fallback. Includes Wi- Fi and GPS accessories available separately. Accessory kit #3.	United States
MTR3-L4G2D-AC00QA-11M	LTE Cat 4 cellular router with fallback. Includes GPS accessories available separately. Accessory kit #3.	

Accessory Kit Specifics

Accessory	Accessory kit #1	Accessory kit #2	Accessory kit #3
2-wire terminal block (power)	✓	✓	✓

Accessory	Accessory kit #1	Accessory kit #2	Accessory kit #3
8-wire terminal block (serial, GPIO)	✓	✓	✓
Power supply with stripped wires	✓	✓	
AU/NZ, EU, GB, US power blade set	✓	✓	
Cellular (LTE) antenna	✓	✓	
GPS antenna	✓	✓	
Ethernet CAT5e cable, 6 ft	✓	✓	
Wi-Fi antenna	✓		

Specifications

Category	Description
General	Description
Regions	Australia, Canada, European Union, United Kingdom, United States
Cellular module	3GPP release 10
performance ¹	4G-LTE FDD/TDD category 4
	150 Mbps peak downlink/50 Mbps peak uplink with 3G/2G fallback
Dual SIM	micro (3FF) SIM cards
Dual Ethernet ports for WAN and LAN connectivity	RJ45 (10/100 BaseT)
RS 232/RS 485(HD)/DIO	Serial data input and Digital IO; 8-pin terminal connector
Frequency bands (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)
	4G LTE FDD (Verizon): B2 (1900), B4 (AWS1700), B13 (700)
	4G LTE FDD (Anterix): B8-US (900)
	4G LTE FDD (APAC): B1 (2100), B9 (1800), B18 (800), B19 (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)
SMS	Mobile Originate, Mobile Terminated, Point-to-Point
Wi-Fi, ACOOPA models	IEEE 802.11a/b/g/n/ac/ax (2.4 and 5 GHz)

¹ Actual device performance speeds may be affected by cell tower distance, data loads, packet sizes, etc.

Category	Description	
GNSS, all models	GNSS systems supported: default; concurrent GPS/QZSS/SBAS and GLONASS	
Physical Description		
Dimensions	117 mm × 117 mm × 38 mm (4.61 in. × 4.61 in. × 1.50 in.)	
Weight	0.5 kg (1 lb)	
Chassis	Aluminum (IP30 rating)	
Mounting options	Desktop; Wall mount (using Wall-Mount accessory); DIN rail mount (using DIN-Mount accessory)	
Power Requirements		
Input voltage	9–36 VDC at 1 A ²	
Power at 12 VDC	Idle: 2.4 W (200 mA)	
	Maximum: 6.5 W (542 mA)	
Environmental		
Operating temperature ³	-40 °C to 75 °C (-40 °F to 167 °F)	
Storage temperature	-40 °C to 85 °C (-40 °F to 185 °F)	
Relative humidity	15%–93% RH non-condensing	
Certifications		
EMC and radio compliance	CE, FCC, IC, RCM, UKCA	
Safety compliance	UL/cUL 62368-1 3rd Edition	
	IEC 62368-1 3rd Edition including IP30	
	AS/NZS 62368.1 3rd Edition	
Network compliance	PTCRB	
Network operator ⁴	AT&T, Verizon	
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, https://www.multitech.com/warranty/	

² This current rating is driven by the Safety Standards. 1 A is the maximum current draw over the entire voltage range. This rating includes 20% margin under full load conditions. Actual power consumption varies with the input voltage selected.

³ Operating temperatures vary based on the power supply:

MultiTech-provided power supply: UL listed at 40 °C (limited by power supply)

Customer-provided DC power cable: UL listed at 75 °C

Customer-provided power supply: Operating temperature determined by power supply specifications and environmental installation location

⁴ The rCell 300 supports other cell providers outside of North America based on the Frequency bands.

Accessories

Ordering Part Number	Description	Region
Power Supply		
PS-12VCB-SWC-U-GLOBAL	100-240 VAC/12 VDC power supply stripped wire connection; includes (4) power blades (Australia/New Zealand, Canada/United States, European Union, United Kingdom)	Australia Canada European Union United Kingdom United States
PB-NAM-V2 LEVEL VI	Replacement power blade; US-style locking power blade, level VI	Canada United States
PB-EU-V2 LEVEL VI	Replacement power blade; European-style locking power blade, level VI	European Union
PB-GB-V2 LEVEL VI	Replacement power blade; GB-style locking power blade, level VI	United Kingdom
PB-AU-V2 LEVEL VI	Replacement power blade; Australian-style locking power blade, level VI	Australia New Zealand
Terminal Blocks		
TBC-2-1	Terminal block connector, 2 wire; used for power connection to the device (1-pack)	Australia Canada European Union United Kingdom United States
TBC-8-1	Terminal block connector, 8 wire; used for GPIO and serial connections (1-pack)	
Cellular Antenna		
ANLTE7-2HRA	LTE antenna, 7.75 in., 2 dBi (2-pack)	Australia Canada European Union United Kingdom United States
ANLTE7-10HRA	LTE antenna, 7.75 in., 2 dBi (10-pack)	
ANLTE7-50HRA	LTE antenna, 7.75 in., 2 dBi (50-pack)	
Wi-Fi Antenna		
ANWBT3-1HRA	Wi-Fi/BT antenna, 2.4 GHz/5.0 GHz (1-pack)	Australia Canada European Union United Kingdom United States
ANWBT3-10HRA	Wi-Fi/BT antenna, 2.4 GHz/5.0 GHz (10-pack)	
ANWBT3-50HRA	Wi-Fi/BT antenna, 2.4 GHz/5.0 GHz (50-pack)	

Ordering Part Number	Description	Region
GPS Antenna		
ANGPS-1MM	GPS antenna, magnetic mount with 5-meter cable (1-pack)	Australia Canada European Union United Kingdom United States
ANGPS-10MM	GPS antenna, magnetic mount with 5-meter cable (10-pack)	
ANGPS-50MM	GPS antenna, magnetic mount with 5-meter cable (50-pack)	
Mounting Kits		
DIN-MOUNT-1	DIN rail mounting kit; includes device bracket, DIN rail clip, and screws (1-pack)	Australia Canada
WALL-MOUNT-1	Wall mounting kit; includes device bracket and screws (1-pack)	European Union United Kingdom United States

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