

MultiTech Conduit[®] IP67 200 Series

IP67 Base Station for Outdoor LoRa[®] Deployments EU868 for Europe

LoRa Alliance

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MultiTech Conduit[®] IP67 200 Series Base Station is a ruggedized IoT gateway solution, specifically designed for outdoor LoRa[®] public or private network deployments. This highly scalable and certified IP67 solution is capable of resisting the harshest environmental factors including moisture, dust, wind, rain, snow and extreme heat, supporting LoRaWAN[®] applications in virtually any environment. The enhanced Conduit IP67 solution can support thousands of LoRaWAN certified end nodes, including the MultiTech mDot[®]* and xDot^{**}. This flexible solution provides durable, low-power, wide area connectivity in support of M2M and IoT applications for both LoRa service providers and individual enterprises wanting to expand their LoRa network coverage.

MULTITECH

Designed for easy deployment, the solution includes an IP67 enclosure, LoRa antenna to improve outdoor range and Ethernet or optional 4G-LTE backhaul. It can be deployed as part of an existing telecommunications tower, individual stand or wall mount.

*Represents ideal network configuration and equipment set up. Results vary depending on payload amount, transmission frequency, spreading factor used, as well as terrain, RF interference and obstruction type (e.g., metal, cement, etc.)

BENEFITS

- Greatly expands LoRa network coverage
- External antenna option increases LoRa connectivity to remote assets
- Improved design enhancing thermal performance and easy external port access to SIM and Ethernet connectors

FEATURES

- ISM band scanning for optimum LoRa performance
- GNSS for location
 coordinate information
- Certified for Europe
 868 MHz ISM bands
- Internal super capacitor helps ensure safe shutdown in case of power failure

multitech.com/ip67-200





Programmable embedded software provides enhanced security and enables task execution at the edge for reduced latency and cost optimization.

mPower[™] Edge Intelligence embedded software delivers programmability, network flexibility, enhanced security and manageability for scalable Industrial Internet of Things (IIoT) solutions.

mPower simplifies integration with a variety of popular upstream IoT platforms to streamline edge-to-cloud data management and analytics, while also providing the programmability and processing capability to execute critical tasks at the edge of the network to reduce latency; control network and cloud services costs, and ensure core functionality – even in instances when network connectivity may not be available.

mPower software specifications can be found **here**.

LENS[®] Embedded Network Server & Key Management Toolset for LoRaWAN[®] Networks

LENS is a hybrid LoRaWAN[®] network management platform that enables deployment and management of LoRaWAN networks at scale. Designed for private and enterprise networks, LENS provides a site-by-site user account and centralized management for LoRa[®] end devices, as well as configuration and control of Conduit[®] gateways. LENS has the capability to assign unique access rights to individual users, add gateways and LoRa end nodes in bulk, or create separate organizations and network segmentation to support different IoT use cases or applications.

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Cloud-based Application Store and IoT Device Management

MultiTech DeviceHQ^{*} is cloud-based tool set for managing the latest generation of MultiTech devices. It incorporates all the functionality of MultiTech Device Manager, on which so many M2M and IoT applications already rely for remote monitoring, upgrades and configuration of entire device populations – whether one or 1 million. DeviceHQ takes remote device management and maintenance to a new level, by providing an application marketplace, allowing users to browse applications or build their own then easily deploy them to and customize them for remote devices from anywhere.



HARDWARE DESCRIPTION



HARDWARE OVERVIEW

Connectors					
Interface	Label	Connector Type			
SIM Card	SIM	3FF Micro SIM			
Ethernet Port		RJ-45 Jack			
Ground Lug	None	7/16 HEX 1/4 x 20 Stainless Steel			
Vent Valve		S-Flange			
Antenna Connectors					
Interface	Label	Connector Type			
Interface LoRa Antenna	Label 1	Connector Type N-Type Antenna Connector			
Interface LoRa Antenna Cellular Antenna (primary)	Label 1	Connector Type N-Type Antenna Connector			
Interface LoRa Antenna Cellular Antenna (primary) GNSS Antenna	Label 1 None	Connector Type N-Type Antenna Connector Internal antenna. No external interface			

HARDWARE SPECIFICATIONS

Feature	Description				
CPU Module	ARM9 processor with 32-Bit ARM & 16-Bit Thumb instruction sets • 400 MHz • 16K Data Cache • 256 MB Flash Memory • 16K Instruction Cache • 128X16M DDR RAM				
WAN Backhaul Options	Ethernet	10/100 Base T	All Models		
	Cellular	LTE Category 1	-LNA3 models only		
GNSS (location, time stamping)	GNSS for LoRa Packet Time Stamping Concurrent GNSS connections: 3 GNSS Systems Supported: GPS, Galileo, QZSS GNSS antenna: Internal to chassis				
LEDs (located beneath plastic cover)	LAN, LORA, CELL, SYS				
Reset Button (located beneath plastic cover)	Recessed push-button used to reset device				
Input Power	Ethernet Input Power: 37 - 57 VDC provided by PSE injector with power rating of 25W or greater				
Power-over-Ethernet (PoE)	PoE Standard: IEEE 802.3at				
Power Draw	See Hardware Guide for current draw at specified voltages				
Internal Super Capacitor	Helps	ensure safe shutdown in case of power	failure		
Physical Description					
Dimensions (L x W x H)	6" x 6" x 4" (152.4 mm x 152.4 mm x 101.6 mm) (see diagram)				
Weight	Approximately 3 lbs (1.4 kg)				
Chassis Type	IP67-Rated composite				
Mounting Options	Wall mount built into chassis (see diagram) / Pole mount (accessory required)				
Environmental					
Operating Temperature	-40° C to +70° C				
Storage Temperature	-40° C to +85° C				
Certifications and Approvals					
EMC Compliance	R(ROHS Directive 2011/65/EU EN 50581:2012 RED Directive 2014/53/EU. Article 3.1b (EMC) EN 301 489-1 V2.1.1 (General) EN 62311:2008 (MPE/RD Exposure)			
Radio Certifications	RED Directive 2014/53/EU. Article 3.2 (Radio)				
Quality	MIL-STD-810G: High Temp, Low Temp, Random Vibration. SAE J1455: Transit Drop & Handling Drop, Random Vibration, Swept-Sine Vibration. IEC68-2-1: Cold Temp. IEC68-2-2: Dry Heat				
Safety	Low Voltage Directive (LVD) 2014/35/EU Article. 3.1a IEC 62368-1:2014 (Second Edition), EN 62368-1:2014 + AC:2017 (Second Edition)				
Warranty	2-Years - www.multitech.com/legal/warranty				