MULTITECH®

MultiTech Conduit® IP67 Base Station

IP67 Conduit for Outdoor LoRa® Deployments

EU868 for Europe and United Kingdom



LoRa Alliance®

MultiTech Conduit® IP67 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.

Designed for easy deployment, the solution includes a MultiTech Conduit with a LoRa MultiTech mCard™, 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 increases LoRa connectivity to remote assets
- Improved design enhancing thermal performance and easy external port access to SIM and USB connectors

FEATURES

- 14 dBm support for European region
- Certified for 868 MHz ISM bands
- ISM band scanning for optimum LoRa performance
- Listen Before Talk operating protocol
- GNSS for location coordinate information

www.multitech.com/IP67

mPower™ EDGE INTELLIGENCE

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**.

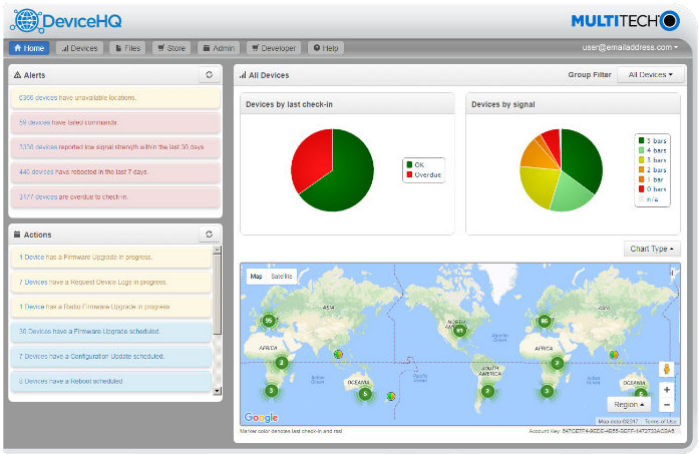
LENS® Embedded Network Server & Key Management Toolset for LoRaWAN® Networks

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.



Cloud-based Application Store and IoT Device Management

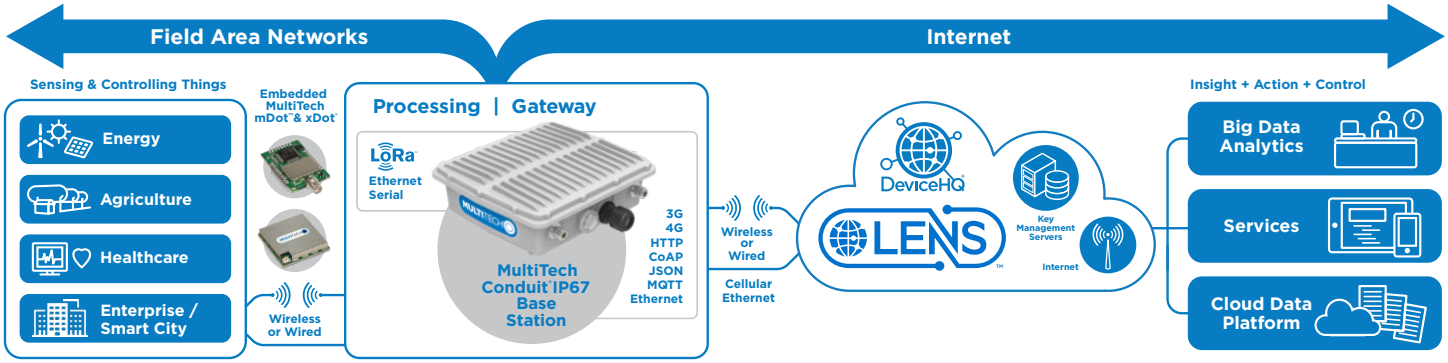
MultiTech DeviceHQ® is cloud-based tool set for managing the latest generation of MultiTech devices. It incorporates all the functionality of MultiTech Device Manager, on which so many M2M and IoT applications already rely for remote monitoring, upgrades and configuration of entire device populations – 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.



SPECIFICATIONS

Models	MTCDTIP-L4E1	MTCDTIP-868
Mobile Network Operator	Europe and United Kingdom Network Operators	non-Cellular
Cellular Performance	4G - LTE Category 4	
Cellular Fallback	3G - HSPA+, 2G - GPRS	
Frequency Band (MHz)	4G: B1(2100), B3(1800), B7(2600), B8(900), B20(800), B28A(700) 3G: B1(2100), B3(1800), B8(900) 2G: B3(1800), B8(900)	
Packet Data (LTE FDD)	Up to 150 Mbps peak downlink Up to 50 Mbps peak uplink	
Input Voltage	Ethernet Input Power: 37 - 57 VDC. POE Standard: IEEE 802.3at, provided by PSE injector with power rating of 25W or greater	
Processor & Memory	ARM9 processor with 32-Bit ARM & 16-Bit Thumb instruction sets • 400 MHz • 16K Data Cache • 16K Instruction Cache • 128X16 MB DDR RAM • 256 MB Flash Memory	
Wi-Fi/Bluetooth (-267 models)	Wi-Fi: 802.11abng (2.4 & 5 GHz) / Bluetooth: Classic 4.1 and BLE	
GPS/GNSS	GNSS for LoRa Packet Time Stamping Concurrent GNSS connections: 3 GNSS Systems Supported: (default: concurrent GPS/QZSS/SBAS and GLONASS)	
LEDs*	PR (Power), ST (Status), L1, L2	
LoRa Specifications		
LoRa Frequency Band	868 MHz	
LoRa Channel Plan	EU868 (EU863 - 870)	
Channel Capacity	8-channels (half-duplex)	
LoRa Maximum Output Power	Maximum EIRP: 14 dBm - 27 dBm**	
Connectors		
E-NET	RJ45 Ethernet jack (10/100 port) (PoE)	
USB HOST*	USB 2.0 Type A connector	
SIM*	3FF Micro SIM	None
Antennas	Cellular, LoRa, GPS: N-Type Female	
Physical Description		
Dimensions (LxWxH)	262 mm x 91 mm x 257 mm	
Weight	2.75 kg	
Chassis Type	IP67 Rated, Aluminum	
Environmental		
Operating Temperature	-40° to +70° C	
Storage Temperature	-40° to +85° C	
Certifications		
EMC Compliance	EN 55023 Class A | EN 301 489-3 V2.1.1 | EN 301 489-1 V2.2.0 | EN 301-489-52 V1.1.0 | CE Mark, UKCA	
Radio Compliance	EN 300 220-1 V3.1.1 | EN 300 220-2 V3.1.1 | EN 300 328 V2.2.2 | EN 301 511 V9.0.2 | EN 301 893 V2.1.1 EN 301 908-1 V11.1.1 | EN 301 902-2 V11.1.1 | EN 301 908-13 V11.1.1 | EN 62311-2008	
Safety	IEC 60950-1	
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	
Warranty	2-Years - www.multitech.com/legal/warranty	

* SIM, LEDs, and USB port accessible under IP67-rated bottom cap cover
** Maximum EIRP is 14 dBm for most of the band, except 27 dBm at 869.4 – 869.65



IP67 BASE STATION STANDARD MOUNTING OPTIONS



Mounting Options
(optional accessories shown)









ORDERING INFORMATION

MultiTech Conduit® IP67 Base Station

Model	Description	Region
MTCDTIP-L4E1-267A-868	LTE Cat 4 mPower Conduit IP67 Base Station 8-channel, 868 MHz, w/ GNSS+Wi-Fi/BT and Accessory Kit - Accessory Kit: Mounting bracket kit, 1 LoRa antenna, 2 cellular antennas, 1 GNSS antenna, 1 Wi-Fi/BT antenna	EU & UK
MTCDTIP-L4E1-266A-868	LTE Cat 4 mPower Conduit IP67 Base Station 8-channel, 868 MHz, w/ GNSS and Accessory Kit - Accessory Kit: Mounting bracket kit, 1 LoRa antenna, 2 cellular antennas, 1 GNSS antenna	EU & UK
MTCDTIP-267A-868	Ethernet only mPower Conduit IP67 Base Station 8-channel, 868 MHz, w/ GNSS+Wi-Fi/BT and Accessory Kit - Accessory Kit: Mounting bracket kit, 1 LoRa antenna, 1 GNSS antenna, 1 Wi-Fi/BT antenna	EU & UK
MTCDTIP-266A-868	Ethernet only mPower Conduit IP67 Base Station 8-channel, 868 MHz, w/ GNSS and Accessory Kit - Accessory Kit: Mounting bracket kit, 1 LoRa antenna, 1 GNSS antenna	EU & UK

RECOMMENDED ACCESSORIES

MultiTech mDot™

Model	Description	Region
MTDOT-868-X1-SMA	868 MHz X1 LoRa SMA	EU & UK
MTDOT-868-X1P-SMA	868 MHz X1 LoRa SMA w/Programming Header	EU & UK
MTDOT-868-X1-UFL	868 MHz X1 LoRa UFL	EU & UK
MTDOT-868-M1-UFL	868 MHz SMT LoRa UFL	EU & UK
MTDOT-868-M1-TRC	868 MHz SMT LoRa RF Pad	EU & UK

MultiTech xDot®

Model	Description	Region
MTXDOT-EU1-A00-1	868 MHz LoRa Module UFL/TRC (Single Pack)	EU & UK

Developer Kit & Accessories

Model	Description	Region
PS-56V-PoE-EU-1	Single Port 30W Power over Ethernet Transformer with EU and UK Power Cord (1 Pack)	EU & UK
PS-56V-PoE-EU-5	Single Port 30W Power over Ethernet Transformer with EU and UK Power Cord (5 Pack)	EU & UK
MTKIT-MTCDTIP-MF-IP67	Conduit IP67-Rated Accessory Kit. Includes Mounting Bracket, 5' Coax Cable N Type, Male/Female Connectors, IP67-rated Lightning Arrestor, Grounding Strap Adapter Kit and Weatherproofing Kit.	Global
LGT-ARRST-IP67-1	IP67-rated Lightning Arrestor and Grounding Strap Adapter Kit (1 Pack)	Global
LGT-ARRST-IP67-5	IP67-rated Lightning Arrestor and Grounding Strap Adapter Kit (5 Pack)	Global
CA-NTYPE-MF-1	Outdoor Coax Cable, N Type Male & Female connectors, 5 feet (1 Pack)	Global
CA-NTYPE-MF-5	Outdoor Coax Cable, N Type Male & Female connectors, 5 feet (5 Pack)	Global
MB-ANT-IP67-1	Conduit IP67 Antenna Mounting Bracket, Mounts One Antenna (1 Pack)	Global
MB-ANT-IP67-5	Conduit IP67 Antenna Mounting Bracket, Mounts 1 Antenna (5 Pack)	Global
AN868-915A-1-IP67	IP67 LoRa Antenna, 15.3" (4.5 dBi) (1 Pack)	Global
AN868-915A-5-IP67	IP67 LoRa Antenna, 15.3" (4.5 dBi) (5 Pack)	Global
ANLTE5-1-IP67	IP67 LTE Antenna, 7" (3.5 dBi) (1 Pack)	Global
ANLTE5-5-IP67	IP67 LTE Antenna, 7" (3.5 dBi) (5 Pack)	Global

Go to www.multitech.com for detailed product model numbers.

Produced in the U.S. of U.S. and non-U.S. components. Features and specifications are subject to change without notice.

The LoRa® name and associated logo are trademarks of Semtech Corporation or its subsidiaries.
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Services & Warranty

MultiTech'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.

Technical Support Services

At MultiTech, 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 MultiTech representative or visit www.multitech.com/support.go

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