

MultiTech Conduit\* is the industry's most configurable, manageable, and scalable cellular communications gateway for industrial IoT applications. Network engineers can remotely configure and optimize their Conduit performance through DeviceHQ\*, the world's first IoT Application Store and Device Management platform. The Conduit features Wi-Fi/Bluetooth/Bluetooth Low Energy (BT/BLE), GNSS, and two accessory card slots that enable users to plug in MultiTech mCard\*\* accessory cards supporting their preferred wired or wireless interface to connect a wide range of assets locally to the gateway.

Available options include a LoRaWAN® mCard capable of supporting thousands of MultiTech mDot® and xDot® long range RF modules connected to remote sensors or appliances. Quick-to-deploy and easy to customize and manage, the Conduit communications gateway realizes your IoT application.

## **GATEWAY BENEFITS**

- Wi-Fi communication supporting 802.11 a/b/g/n 2.4 GHz and 5GHz with WPA2 personal transmission security. Wi-Fi Access Point and Client modes are supported simultaneously.
- BT Classic and BLE 4.1 communication supports local connectivity with automatic pairing with target devices utilizing 128 bit link key length security.
- GNSS module for LoRaWAN packet time-stamping and geo-location capability
- Backhaul options include Ethernet and optional 4G-LTE, 3G, 2G cellular for cost effective deployment

#### **LORA FEATURES**

- Certified for North American 915 MHz ISM bands
- ISM band scanning for optimum LoRa® performance
- Listen Before Talk LoRa operating protocol





# 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

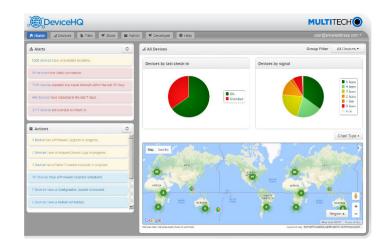
LENS is a hybrid LoRaWAN\* network management platform that enables deployment and management of LoRaWAN networks at scale. Designed for private and enterprise networks, LENS provides a site-by-site user account and centralized management for LoRa\* end devices, as well as configuration and control of 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	MTCDT-L4N1	MTCDT-H5	MTCDT
Mobile Network Operator	AT&T & Verizon	AT&T European Network Operators	Ethernet Only
Cellular Performance	4G-LTE Category 4	3G-HSPA+	
ellular Fallback	3G - HSPA+ (AT&T only)	2G - GPRS	
Frequency Band (MHz)	AT&T: 4G: B2(1900), B4(AWS1700), B5(850), B12(700a), B14(700 FirstNet), B66(AWS-3 1700), 3G: B2(1900), B4(AWS1700), B5(850)  Verizon: 4G: B4(AWS1700), B13(700c)  Other Bands Supported: B71(600)	3G: 850 / 900 / 1700 (AWS) / 1900 / 2100 2G: 850 / 900 / 1800 / 1900	No Cellular
FirstNet Support	Yes (AT&T) <sup>†</sup>	No	-
Packet Data (LTE FDD)	Up to 150 Mbps peak downlink Up to 50 Mbps peak uplink	Up to 21 Mbps peak downlink Up to 5.76 Mbps uplink	
nput Voltage	9 VDC 1.7A input provided to 100 - 240 VAC 50/60 Hz external adaptor or fused DC Power Cable		
Processor and 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		
Ni-Fi/Bluetooth -247 models)	WiFi: 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)		
EDs		(Power Status), LS (Link Status), CD (Carrier De	etect), SIGNAL (Signal Strength)
•	nclude MTAC-LORA Gateway Accessory Card)		
oRa Frequency Band	915 MHz		
oRa Channel Plan	US915		
Channel Capacity	8-channels (half-duplex)		
oRa Power Output	27 d	Bm maximum output power before antenna	
Connectors			
ower	2.5 mm miniature barrel jack (screw-on)		
-NET	RJ45 Ethernet jack (10/100 port)		
JSB DEVICE	USB 2.0 Micro B connector		
JSB HOST	USB 2.0 Type A connector		
AP1, AP2	MultiTech mCard Gateway Accessory Cards		
IM (under nameplate)	2FF Mini SIM None  Micro SD Card 72CB (HSMCI) may (industrial temporature range recommended)		
D Card (under nameplate)	Micro SD Card, 32GB (HSMCI) max (industrial temperature range recommended)  Cellular, GPS: Female SMA / Wi-Fi, LoRa: Reverse polarity Female SMA		
Antennas Physical Description	Cellular, GP3. Fe	eniale SMA / WI-FI, Loka. Reverse polarity Femile	HIE SIMA
Dimensions (L x W x H)	6 75" v 4 27" v 1 60" (161 7 mm v 107 4 mm v 42 0 mm)		
	6.35" x 4.23" x 1.69" (161.3 mm x 107.4 mm x 42.8 mm)		
Veight	1.0 lbs (0.45 kg) with two accessory cards installed		
Chassis Type		Anodized aluminum (blue)	
Environmental		70° to 170° C*	
Operating Temperature	-30° to +70° C*		
Storage Temperature	-40° to +85° C		
dumidity Certifications	Rela	tive humidity 20% to 90%, non-condensing	
Seruncations		Australia: CIS	PR 32
MC Compliance	US: FCC Part 15 Class A Canada: ICES-003 Class A	EU: EN 55032 Class A, EN 301 489-3 V2.1.1, EN 301 489-1 V2.2.0, EN 301-489-52 V1.1.0	
Radio Compliance	US: FCC Part 22, 24, 27 Canada: ISED	US: FCC Part 22, 24, 27	US: FCC Part 22, 24, 27 Canada: ISED-003 AU: AS/NZS 4268:2012 + A1:201 MPE Standard 2014
Safety	UL/cUL 60950-1, UL/cUL 62368-1		
Mobile Network Operator Approvals	PTCRB, AT&T, Verizon PTCRB, AT&T N/A GCF Certified Cell Module		
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		
	a.a.a.ii, owe	ears / www.multitech.com/legal/warranty	, <del></del>

<sup>†</sup> All future end-user (OEM) devices will and must go through FirstNet certification prior to being included in the FirstNet device ecosystem.