MULTITECH®

mPower™
EDGE INTELLIGENCE

Introducing
MultiTech Conduit® 300
Gateway Developer Kit

Next-Gen Cloud Orchestration for Industrial IoT

The new Conduit® 300 Series gateway developer kit featuring mPower™ Edge Intelligence enables streamlined edge-to-cloud orchestration, management and analytics together with a high-performance, secure processor to support Dockers and containers for easy programmability and built-in compatibility with leading IoT software platforms.

A 16-channel LoRaWAN® gateway with dual high-speed Ethernet ports and an embedded MultiTech Dragonfly™ LTE Category 4 cellular radio, it is driven by a secure Texas Instruments Sitara processor which allows application portability for future deployment and scalability. A choice of included connectivity options makes the Conduit 300 Series gateway developer kit ideal for a variety of industrial applications communicating with a diverse set of end-points and protocols.

mPower Edge Intelligence simplifies integration with a variety of popular upstream IoT platforms to streamline edge-to-cloud data management and analytics, while also providing the programmability, machine learning and processing capability to execute critical tasks at the edge of the network. Moreover, mPower Edge Intelligence incorporates a host of security features including signed firmware validation, enhanced firewall and VPN settings, secure authentication and more.

Key Benefits

- High security hardware
- Protect thousands of end devices with highly secure programmable gateway
- Simplified and streamlined edge-to-cloud management and analytics
- Simultaneous communication between gateway and endpoints
- Approved for use with global LoRa channel plans
- Cost effectively determine the location of remote assets
- Easy to deploy
- Multiple backhaul options
- Multiple power options support different use cases and applications

HARDWARE SPECIFICATIONS

Feature	Description		
CPU Module	Texas Instruments Sitara Processor Cortex A9 processor • 1 GHz • 32K L1 Instruction and Data Cache • 256K L2 Cache Volatile Memory: 2GB DDR3 RAM Non-Volatile Memory: 4 GB Flash Memory eMMC		
LoRa Modules	Frequency Band	Channel Plan	
	868 MHz	EU868	
		IN865	
		RU864	
	915 MHz	US915	
		AU915	
		AS923	
		KR920	
WAN Backhaul Options	Ethernet	10/100/1000 Base T	All Models
	Cellular	4G-LTE	-LNA7, -LEU7 models only
	Wi-Fi	802.11abng (2.4 & 5 GHz)	All Models
GNSS (location, time stamping)	GNSS for LoRa Packet Time Stamping Concurrent GNSS connections: 3 GNSS Systems Supported: (default: concurrent GPS/QZSS/SBAS and GLONASS		
Wi-Fi/Bluetooth	Wi-Fi: 802.11abng (2.4 & 5 GHz) Bluetooth: Classic 4.2 and BLE		
LEDs	Four pre-defined LEDs to communicate system status: Power, LAN, Cellular, Platform Connect Status		
Connectors			
Hardware Connectors	Front Panel (behind nameplate): SIM: 3FF Micro SIM Holder (Cellular WAN models only) USB DEBUG: USB 2.0 Type A Female Connector Back Panel: Power: TBD mm miniature (screw-on) E-NET (LAN): RJ-45 jack (10/100/1000 port) POE: RJ-45 jack for POE USB HOST: USB 2.0 Type A Female Connector (firmware updates) USB DEVICE: USB 2.0 Micro B Female Connector		
Antenna Connectors	Front Panel: LORA1 and LORA2: Female Reverse Polarity SMA Back Panel: Wi-Fi/BT: Female Reverse Polarity SMA GPS (GNSS): Female SMA CELL1 AND CELL2: Female SMA (cellular WAN models only)		
Power-Over Ethernet (POE)	37 - 57 VDC	Provided by PSE injector with power rating of 25W or greater	
DC power	12 – 32 VDC Average Power Draw 15.3 Watts. Provided by power adapter or DC power cable		

CELLULAR WAN SPECIFICATIONS

Models	MTCDT3-LNA7	MTCDT3-LEU7
Mobile Network Operator (MNO)	AT&T Verizon	European Union Network Operators
Cellular Radio	MTQ-LNA7-B02 Quectel EG95-NA	MTQ-LEU7-B02 Quectel EG95-E
Cellular Performance	4G-LTE Category 4	4G-LTE Category 4
Cellular Fallback	AT&T: 3G - HSPA+ Verizon: No Fallback	3G - HSPA+, 2G - GPRS
Frequency Bands	**AT&T:4G:** B2 (1900), B4 (AWS1700), B5 (850), B12 (700), B13 (700) **3G:** B2 (1900), B5 (850) **Verizon:4G:** B2 (1900), B4 (AWS1700)	**4G:** B1 (2100), B3 (1800), B7 (2600), B8 (900), B20 (800), B28A (700) **3G:** B1 (2100), B8(900) **2G:** B3 (1800), B8(900)
Packet Data (LTE FDD)	150 Mbps peak downlink 50 Mbps peak uplink	150 Mbps peak downlink 50 Mbps peak uplink
SIM Card	(1) 3FF Micro SIM	(1) 3FF Micro SIM
LoRa Frequency Band	US915	EU868

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

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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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