DATASHEET

HARDWARE SPECIFICATIONS

		MTCDT-L4G1
Models		**MTCDT-L4G1**
Ordering Part numbers		MTCDT-L4G1-246A-915.R3-WW
Mobile Network Operator	-	AT&T Verizon T-Mobile
Cellular Radio	-	MTSMC-L4G1 using EG25-G cell module
Cellular Performance	-	4G-LTE Category 4
Cellular Fallback	-	3G - HSPA +, 2G - GPRS
Frequency Band (MHz)	-	**4G FDD:** B1(2100), B2(1900), B3(1800), B4(AWS1700), B5(850), B7(2600), B8(900), B12/B13(700), B18(850), B19(850), B20(800), B25(1900), B26(850), B28(700) **4G TDD:** B38(2600), B39(1900), B40(2300), B41(2500) **3G:** B1(2100), B2(1900), B4(AWS1700), B5(850), B6(800), B8(900), B19(850) **2G:** B2(1900), B3(1800), B5(850), B8(900)
Packet Data (LTE)	-	**4G-FDD:** Up to 150 Mbps peak downlink. Up to 50 Mbps peak uplink **4G-TDD:** Up to 130 Mbps peak downlink. Up to 30 Mbps peak uplink
Input 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
GPS/GNSS		GNSS for LoRa Packet Time Stamping Concurrent GNSS connections: 3 GNSS Systems Supported: (default: concurrent GPS/QZSS/SBAS and GLONASS)
LEDs	PWR (Power), STATUS (Power Status)	PWR (Power), STATUS (Power Status), LS (Link Status), CD (Carrier Detect), SIGNAL (Signal Strength)

Connectors

Power	2.5 mm miniature barrel jack (screw-on)
E-NET	RJ45 Ethernet jack (10/100 port)
USB DEVICE	USB 2.0 Micro B connector
USB HOST	USB 2.0 Type A connector
AP1, AP2	MultiTech mCard Gateway Accessory Cards
SIM (under nameplate)	-	2FF Mini SIM
SD Card (under nameplate)	Micro SD Card, 32GB (HSMCI) max (industrial temperature range recommended)
Antennas	GPS, LoRa: female SMA / LoRa: reverse polarity female SMA	Cellular, GPS, LoRa: female SMA / LoRa: reverse polarity female SMA

Physical Description

Dimensions (L x W x H)	6.35" x 4.23" x 1.69" (161.3 mm x 107.4 mm x 42.8 mm)
Weight	1.0 lbs (0.45 kg) with two accessory cards installed
Chassis Type	Anodized aluminum (blue)

Environmental

Operating Temperature	-30° to +70° C
Storage Temperature	-40° to +85° C
Humidity	Relative humidity 20% to 90%, non-condensing

Certifications

EMC Compliance		US: FCC Part 15 Class A Canada: ICES-003 Class A Australia: CISPR 32
Radio Compliance		US: FCC Part 22, 24, 27 Canada: ISED Australia: AS/NZS 4268:2012 + A1:2013 MPE Standard 2014
Safety	U	UL/cUL 60950-1, UL/cUL 62368-1
Mobile Network Operator Approvals	-	US: PTCRB, AT&T, Verizon** Australia: RCM, Optus, Telstra, Vodafone
Mobile Network Operator (Approvals Pending) Contact MultiTech for details	-	US: T-Mobile, US Cellular Canada: Rogers, Telus
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

* Maximum EIRP is 14 dBm for most of the band, except for 27 dBm at 869.4-869.5 ** MTSMC-L4G1 is PTCRB, AT&T, and Verizon approved

LORAWAN SPECIFICATIONS (915 MHz LoRa Module)

Country	Channel Plan	Power Output	EIRP	RX Range	TX Range	Receive Sensitivity
Australia	AU915	21.5 dBm	24.5 dBm	917.5-927.5 MHz	917.5-927.5 MHz	-124.8 to -138.9 dBm
Australia	AS923-1	21.5 dBm	24.5 dBm	923.2-923.4 MHz	923.2-923.4 MHz	-124.8 to -138.9 dBm
United States, Canada	US915	27 dBm	30 dBm	902 - 928 MHz	902 - 928 MHz	-124.8 to -138.9 dBm
Malayzia	AS923-1	21.5 dBm	24.5 dBm	919 - 924 MHz	919 - 924 MHz	-124.8 to -138.9 dBm
Singapore	AS923-1	21.5 dBm	24.5 dBm	920 - 925 MHz	920 - 925 MHz	-124.8 to -138.9 dBm
Thailand	AS923-1	21.5 dBm	24.5 dBm	923 - 924 MHz	923 - 924 MHz	-124.8 to -138.9 dBm

ORDERING INFORMATION

Ordering Part numbers	Description
MTCDT-L4G1-246A-915.R3-WW	LTE Cat 4 mPower Programmable Gateway 8-channel, 915 MHz, Global GNSS+Wi-Fi/BT w/MTAC-003 mCard and Accessory Kit