About the Conduit® AP 200 Series Access Point

Conduit AP (MTCAP2) securely connects thousands of LoRaWAN® wireless IoT sensors to the cloud using the LoRaWAN® protocol. The Conduit AP Access Point packet forwarding gateway offers Ethernet and Cellular Wide Area Networks seamless connectivity options to connect to Cloud based applications in centrally located data centers.

MTCAP2 Ordering Options

Ordering Part Number	Description	Cellular Region
MTCAP2-LNA3-915-042A-POE	LTE Cat 1 mPower Programmable Access Point with optional PoE power, external LoRa antenna, and US Accessory Kit (AT&T/Verizon)	Canada United States
MTCAP2-LNA3-915-042L-POE	LTE Cat 1 mLinux Programmable Access Point with optional PoE power, external LoRa antenna, and US Accessory Kit (AT&T/Verizon)	
MTCAP2-915-042A-POE	mPower Programmable Access Point with optional PoE power, external LoRa antenna, and US Accessory Kit	
MTCAP2-915-042L-POE	mLinux Programmable Access Point with optional PoE power, external LoRa antenna, and US Accessory Kit	
MTCAP-L4E1-868-002A	LTE Cat 4 mPower Programmable Access Point with optional PoE power, internal LoRa antenna and EU/UK Accessory Kit (Europe)	European Union United Kingdom
MTCAP-L4E1-868-002L	LTE Cat 4 mLinux Programmable Access Point with optional PoE power, internal LoRa antenna and EU/UK Accessory Kit (Europe)	
MTCAP-868-002A	mPower Programmable Access Point with optional PoE power, internal LoRa antenna and EU/UK Accessory Kit (Europe)	
MTCAP-868-002L	mLinux Programmable Access Point with optional PoE power, internal LoRa antenna and EU/UK Accessory Kit (Europe)	

Specifications

LNA3 Specifications

Category	Description
General	
Standards	LoRaWAN 1.0.2 specifications
	LTE 3GPP Release 9
	HSPA+
RAM	256MB
Flash	256MB
Radio Frequency	
ISM Band	915 MHz ISM band for US and Canada
4G/LTE	1900 (B2) / AWS 1700 (B4) / 850 (B5) / 700 (B12/13)
3G	1900 (B2) / 850 (B5)
Physical Description	
Weight	0.4 kg
Dimensions	Refer to Mechanical Drawings for Dimensions.
Chassis Type	PC-ABS
Environment	
Operating Temperature[1]	-0° C to +70° C
Storage Temperature	-40° C to +85° C
Humidity	20%-90% RH, non-condensing
Power Requirements	
Operating Voltage	5Vdc, 1.4A
PoE Standard	IEEE 802.3at

Category	Description
PoE Input Power	38-57 Vdc
LoRa EIRP Maximum	27dbm conducted and 30db EIRP when using external 3db gain antenna
Certifications and Compliance	
EMC and Radio Compliance	FCC Part 15 Class B[2]
	FCC Part 15.247 (LoRa)
	FCC 22H, 24E, 27
Safety Compliance	UL 62368-1 2nd Ed
	UL / IEC 62368-1

[1] UL listed at 40° C, limited by AC power supply. Product has been tested to +70° C excluding power supply.

[2] To maintain Part 15 Class B classification, use a Class B PoE injector. Using a Class A PoE injector changes the classification for the system to Class A.

L4E1 Specifications

Category	Description
General	
Standards	LoRaWAN 1.0.2 specifications
	LTE FDD Cat 4, 3GPP release compliant (-L4E1 models only)
	HSPA+ with GPRS fallback (-L4E1 models only)
RAM	256MB
Flash	256MB
Radio Frequency	
ISM Band	868 MHz ISM band for Europe
4G/LTE	4G: B1, B3, B7, B8, B20, B28A (-L4E1 models only)
3G	3G: B1, B3, B8 (-L4E1 models only)
2G	2G: B3, B8 (-L4E1 models only)
Physical Description	
Weight	0.41 kg
Dimensions	Refer to Mechanical Drawings for Dimensions.
Chassis Type	PC-ABS
Environment	
Operating Temperature[1]	-0° C to +70° C
Storage Temperature	-40° C to +85° C
Humidity	20%-90% RH, non-condensing
Power Requirements	
Operating Voltage	5Vdc, 1.4A
PoE Standard	IEEE 802.3at
PoE Input Power	38-57 Vdc
LoRa ERP[2]	13.3 dBm ERP for low power channels, maximum 14 dB.
	25.8 dB for high power channels, maximum 27 dB.
Certifications and Compliance	
EMC and Radio Compliance	CE Mark, RED (EU)
Safety Compliance	UL/IEC 62368-1

[1] UL listed at 40° C, limited by AC power supply. Product has been tested to +70° C excluding power supply.

[2] Determined using the internal LoRa antenna of 0.85 dB gain. If using an external LoRa antenna, adjust levels to ensure maximum values are not exceeded.

Important: 2G fallback can cause issues when operating on battery power. If you have a SIM that supports 2G fallback, consult your carrier for options.

mPower™ Edge Intelligence

mPower™ Edge Intelligence is an embedded software offering to deliver programmability, network flexibility, enhanced security, and manageability for scalable Industrial Internet of Things (IIoT) solutions. mPower represents the unification and evolution of well-established MultiTech smart router and gateway firmware platforms.

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 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. In response to evolving customer security requirements, mPower Edge Intelligence incorporates a host of new security features including signed firmware validation, secure boot, new Cloud management, programmability of custom apps, DI/DO, and more.

Accessories

To find information on accessories for your product, go to https://multitech.com/all-products/accessories/.

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