



M3X

Expeditionary Networking and Compute Platform

About Cubic Mission Solutions

Cubic is a global provider of integrated systems and services that increase situational awareness and understanding for customers worldwide.

- We solve complex problems with innovative technology, systems and solutions.
- We design, integrate and operate systems, products and services that increase situational awareness for our customers.
- We make it our mission to increase efficiencies, reduce costs and improve the user experience.
- We accelerate the implementation of next-generation solutions.

Today, some of the world's most critical communications rely on Cubic Mission Solutions. Our technology helps government agencies and military organizations benefit from the emerging internet of battlefield things.

Any Mission. Any Time. Anywhere.

M3X

Deploy Fast, Connect Faster.



					
Rapid Deployment	Modular & Scalable	Low SWaP	Cable-less Design	Smart Battery & Power	Low Cost of Ownership

Guided by continuous customer collaboration, the M3X delivers powerful compute, high-speed networking and storage to users operating in the harshest environments. Ideal for users that need to deploy fast and connect faster; the M3X offers users several interlocking modules providing Cisco networking, Intel Xeon processing, file storage and smart battery backup with power management.

The unique chassis-less design and Modular Rail System reduce system Size Weight and Power while delivering a highly scalable and easy to use solution. At the same time, the patented Raised Angle Connector provides power and data to each module without the need for cables. A standard two year warranty lowers the total cost of ownership and provides peace of mind for M3X users.



M3X-APP



High performance up to 16 Core Xeon D server with up to 128GB of RAM and a single 7mm / 2.5" SSD Solid-state Drive ensures the M3X-APP is more than capable of running server applications, virtual machines and wireless LAN controllers at the tactical edge.

Module	M3X-APP
Dimensions	
Length (in / cm)	8.90 / 22.60
Width (in / cm)	5.75 / 14.60
Height (in / cm)	2.70 / 6.86
Weight (lbs / kgs)	5.05 / 2.29
Power Consumption	64W Nominal, 84W Maximum
Power Input	10-30VDC Wide Range
Power Output	10-30VDC Rear I/O
PoE	Up to 30W with full PoE*
Number of Ports	5 x GE Ports (2 Front PoE+, 1 Rear PoE+, 1 Top RAC, 1 Bottom RAC) 2 x 10GE Ports
Ancillary	1 x RJ45 Serial Console Port 2 x USB 3.0 Ports
Processor	Intel Xeon Processor, 12 or 16 Cores
RAM	128GB
Storage	7 mm/2.5" SSD
Operating / Storage Temperature (°F / °C)	Operating: 32 to 140 / 0 to 60 Storage: -4 to 185 / -20 to 85
Certifications	IP67, MIL-STD-810 and MIL-STD-461

*Subject to Power Source



M3X-BPS



Smart Battery Power Supply (BPS) supplying over 96 watt-hours of power to a vertical stack of equipment. Multiple M3X-BPS modules can be placed anywhere in a stack providing additional reserve battery power to support mission requirements.

Module	M3X-BPS
Dimensions	
Length (in / cm)	8.90 / 22.60
Width (in / cm)	5.75 / 14.60
Height (in / cm)	1.55 / 3.94
Weight (lbs / kgs)	3.35 / 1.51
Power Consumption	1.4W min / 20W nom / 22.83W max (while charging)
Power Input	10-30VDC Wide Range
Power Output	8A Through RAC
Ancillary	1 x USB 3.0 (power only)
Operating / Storage Temperature (°F / °C)	Operating: 32 to 140 / 0 to 60 Storage: -4 to 185 / -20 to 85
Certifications	IP67, MIL-STD-810 and MIL-STD-461



M3X Tactical Edge Communication Solutions

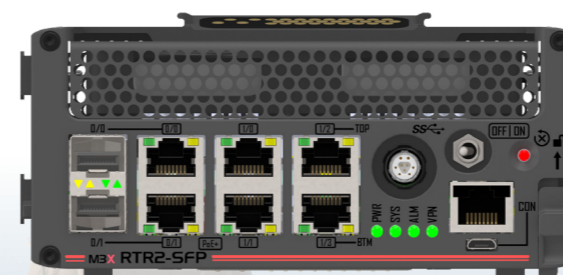
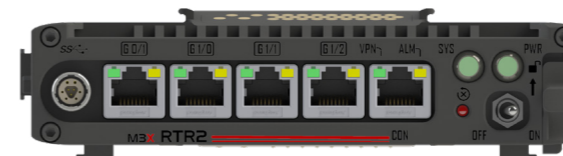
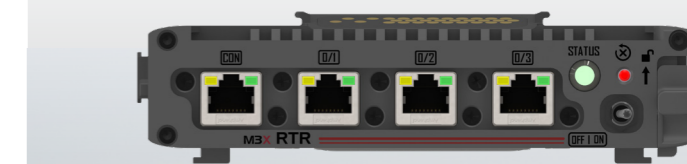
M3X-RTR



Powered by the widely used Cisco ESR-5915, the M3X-RTR is a full Fast Ethernet router featuring 2 x FE layer 3 routed ports and 3 x FE layer 2 switch ports.

Module	M3X-RTR
Dimensions	
Length (in / cm)	8.90 / 22.60
Width (in / cm)	5.75 / 14.60
Height (in / cm)	1.55 / 3.94
Weight (lbs / kgs)	2.95 / 1.34
Power Consumption	6.04W Min. / 6.64W Nom. / 7.17W Max
Power Input	10-30VDC Wide Range
Power Output	10-30VDC Rear I/O
PoE	Up to 75W with full PoE*
Number of Ports	5 x FE Ports (3 x RJ45 Front, 2 x Rear/RAC)
Ancillary	1 x RJ45 Console Port
Processor	Cisco ESR-5915
RAM	512MB
Storage	256MB Internal Flash
Operating / Storage Temperature (°F / °C)	Operating: 32 to 140 / 0 to 60 Storage: -4 to 185 / -20 to 85
Certifications	IP67, MIL-STD-810 and MIL-STD-461

*60W with M3X-DPS2 and 75W with M3X-DPS



M3X-RTR2



Based on the trusted Cisco ESR-6300, the M3X-RTR2 modules are full Gigabit Ethernet routers featuring 2 x GE PoE or 2 x SFP layer 3 routed WAN ports and 4 x PoE GE layer 2 switch ports. Both modules support Cisco Command Line Interface and up to 32GB of removal storage.

Version	M3X-RTR2	M3X-RTR2-SFP
Dimensions		
Length (in / cm)	8.90 / 22.60	8.90 / 22.60
Width (in / cm)	5.75 / 14.60	5.75 / 14.60
Height (in / cm)	1.55 / 3.94	2.70 / 6.86
Weight (lbs / kg)	3.00 / 1.36	4.70 / 2.13
Power Consumption	22W Maximum	
Power Input	10-30 VDC Wide Range	
Power Output	10-30 VDC Rear I/O	
PoE	Up to 75W with full PoE*	
Number of Ports	2 x GE PoE+ WAN ports 4 x GE PoE+ LAN ports	2 x GE PoE+ / SFP WAN ports 4 x GE PoE+ LAN ports
Ancillary	1 x Console Port (RJ45) 1 x USB via Fischer	1 x Console Port (RJ45 or Mini-USB) 1 x USB via Fischer
Processor	Cisco ESR-6300	
RAM	4 GB DDR4 Memory	
Storage	4 GB usable (pSLC mode) eMMC flash 32 GB removable rugged flash (optional)	
Operating / Storage Temperature (°F / °C)	Operating: 32 to 140 / 0 to 60 Storage: -4 to 185 / -20 to 85	
Certifications	CE, IP67, MIL-STD-810 and MIL-STD-461	CE, MIL-STD-810 and MIL-STD-461

*60W with M3X-DPS2 and 75W with M3X-DPS



M3X-S8G

The M3X-S8G switch provides 8 x 1GE POE ports and 2 x 10GE SFP+ ports utilizing the Cisco ESS-3300 embedded switch.

Module	M3X-S8G
Dimensions	
Length (in / cm)	8.90 / 22.60
Width (in / cm)	5.75 / 14.60
Height (in / cm)	2.70 / 6.86
Weight (lbs / kgs)	4.51 / 2.05
Power Consumption	13.9W min / 15.2W nom / 23W max
Power Input	10-30VDC Wide Range
Power Output	10-30VDC Rear I/O
PoE	Up to 100W with full PoE+ (8 ports)*
Number of Ports	8 x GE Ports 2 x SFP+
Ancillary	1 x RJ45 Console Port 1 x Micro USB Console Port 1 x MicroSD Card Slot
Processor	Cisco ESS-3300
RAM	4GB
Storage	Removable MicroSD Card 4GB eMMC Flash
Operating / Storage Temperature (°F / °C)	Operating: 32 to 140 / 0 to 60 Storage: -4 to 185 / -20 to 85
Certifications	MIL-STD-810 and MIL-STD-461

*60W with M3X-DPS2 and 100W with M3X-DPS



M3X-S24G

Powered by an embedded Cisco ESS-3300 switch, the M3X-S24G provides a 24 x GE port switch plus 2 x 10GE SFP+ ports.

Module	M3X-S24G
Dimensions	
Length (in / cm)	8.90 / 22.60
Width (in / cm)	5.75 / 14.60
Height (in / cm)	4.05 / 10.30
Weight (lbs / kgs)	5.95 / 2.70
Power Consumption	25W min / 29W nom / 36W max
Power Input	10-30VDC Wide Range
Power Output	10-30VDC Rear I/O
PoE	Up to 100W with Full PoE+ Capability*
Number of Ports	24 x GE Ports 2 x 10GE
Ancillary	1 x RJ45 Console Port 1 x Micro USB Console Port 1 x MicroSD Card Slot
Processor	Cisco ESS-3300
RAM	4GB
Storage	Removable MicroSD Card 4GB eMMC Flash
Operating / Storage Temperature (°F / °C)	Operating: 32 to 140 / 0 to 60 Storage: -4 to 185 / -20 to 85
Certifications	MIL-STD-810 and MIL-STD-461

*60W with M3X-DPS2 and 100W with M3X-DPS

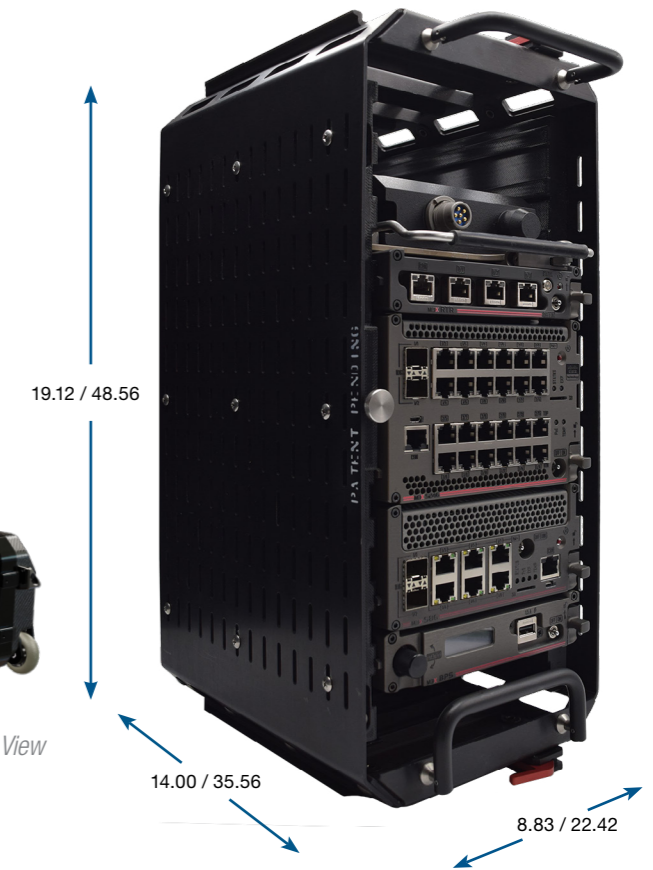
ECS 1/3 Fusion Rack Case

Carbon fiber 1/3 rack case for rugged protection during transportation, operation, and storage of your M3X solution. The internal rack can be easily removed for placement horizontally in a standard 19" rack. A retractable handle and integrated wheels make the enclosure ideal for airline carry-on.

Module	Fusion Rack Case
Dimensions	
Height (in / cm)	19.12 / 48.56
Width (in / cm)	8.83 / 22.42
Length (in / cm)	14.00 / 35.56
Weight (lbs / kgs)	10.21 / 4.63



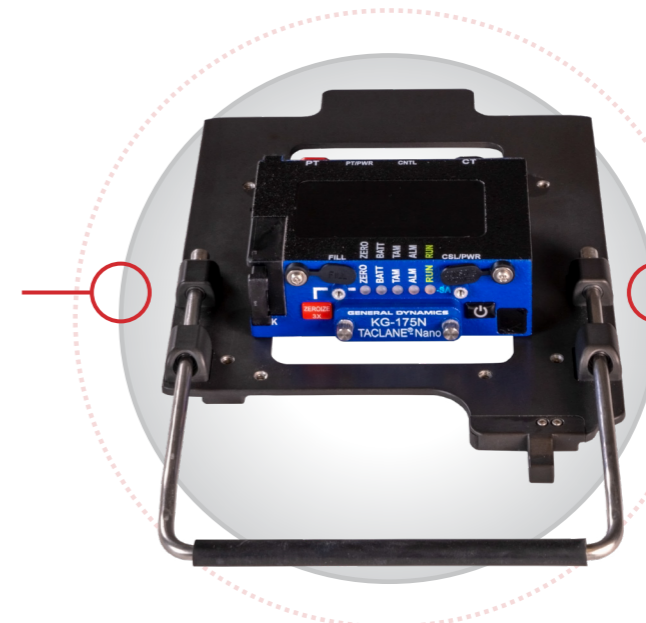
Rack Case Exploded View



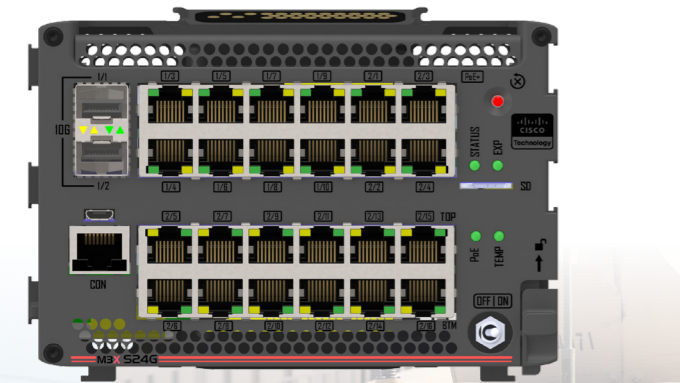
M3X-MT1

The M3X-MT1 is an easy to use mounting bracket that enables third-party devices such as country-specific cryptos to be quickly and easily attached to the top of an M3X system stack.

3rd party device mounting bracket



Attaches to top of M3X modules





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