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.
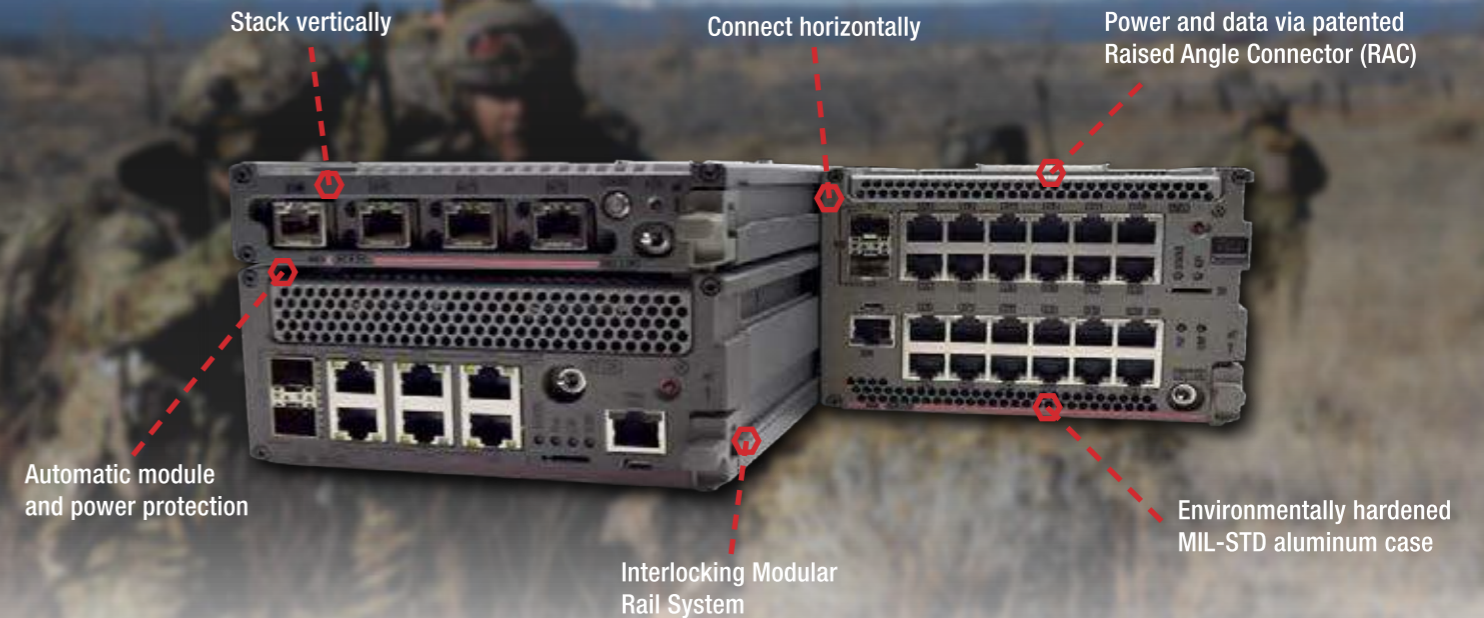
- We solve complex problems with innovative technology, systems and solutions.

- 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 Tactical Edge Communication Solutions

M3X
Deploy Fast, Connect Faster.

Stack vertically

Connect horizontally

Power and data via patented Raised Angle Connector (RAC)

Automatic module and power protection

Interlocking Modular Rail System

Environmentally hardened MIL-STD aluminum case

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 Tactical Edge Communication Solutions

M3X-APP

IP 67

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 (standalone/max)	
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 Input	10-30VDC Wide Range
Power Output	10-30VDC Rear I/O
PoE	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

M3X-BPS

IP 67

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 (standalone/max)	
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
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

IP 67

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 (standalone/max)	
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	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

M3X-RTR2

IP 67

Based on the trusted Cisco ESR-6300, the M3X-RTR2 is a full Gigabit Ethernet router featuring 2 x GE layer 3 routed ports, 4 x GE layer 2 switch ports and removable storage.

Module	M3X-RTR2
Dimensions (standalone/max)	
Length (in / cm))	8.90 / 22.60
Width (in / cm)	5.75 / 14.60
Height (in / cm)	1.55 / 3.94
Power Input	10-30VDC Wide Range
Power Output	10-30VDC Rear I/O
Number of Ports	6 x GE Ports (4 x RJ45 Front, 2 x Rear/RAC)
Ancillary	1 x RJ45 Console Port 1 x USB via Fischer (Minimax)
Processor	Cisco ESR-6300
RAM	4GB
Storage	4GB eMMC 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

M3X Tactical Edge Communication Solutions

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 (standalone/max)	
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	100W with full PoE+ (8 ports)
Number of Ports	8 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

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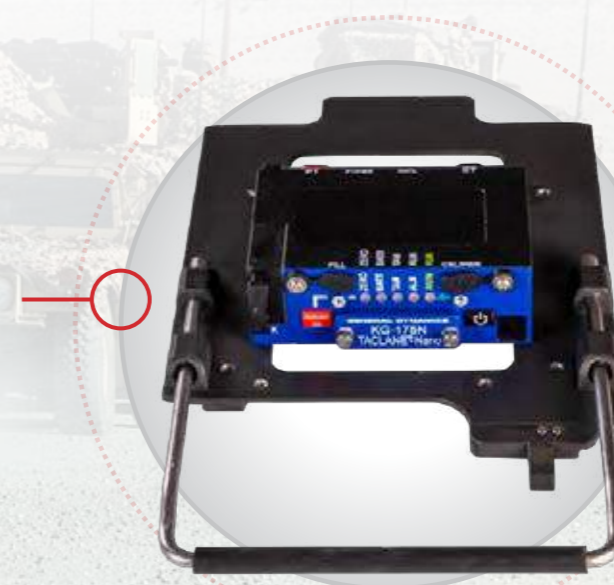
Powered by an embedded Cisco ESS-3300 switch, the M3X-S24G provides a 24 x GE port switch plus 2 x 10GE SFP+ ports.

Module	M3X-S24G
Dimensions (standalone/max)	
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	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

M3X Tactical Edge Communication Solutions

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	M3X-S24G
Dimensions	
Length (in / cm)	19.12 / 48.56
Width (in / cm)	14.00 / 35.56
Height (in / cm)	8.83 / 22.42
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

M3X Tactical Edge Communication Solutions

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