



MXNet 10G NETWORK SWITCH (AC-MXNET-10G-SW24C)

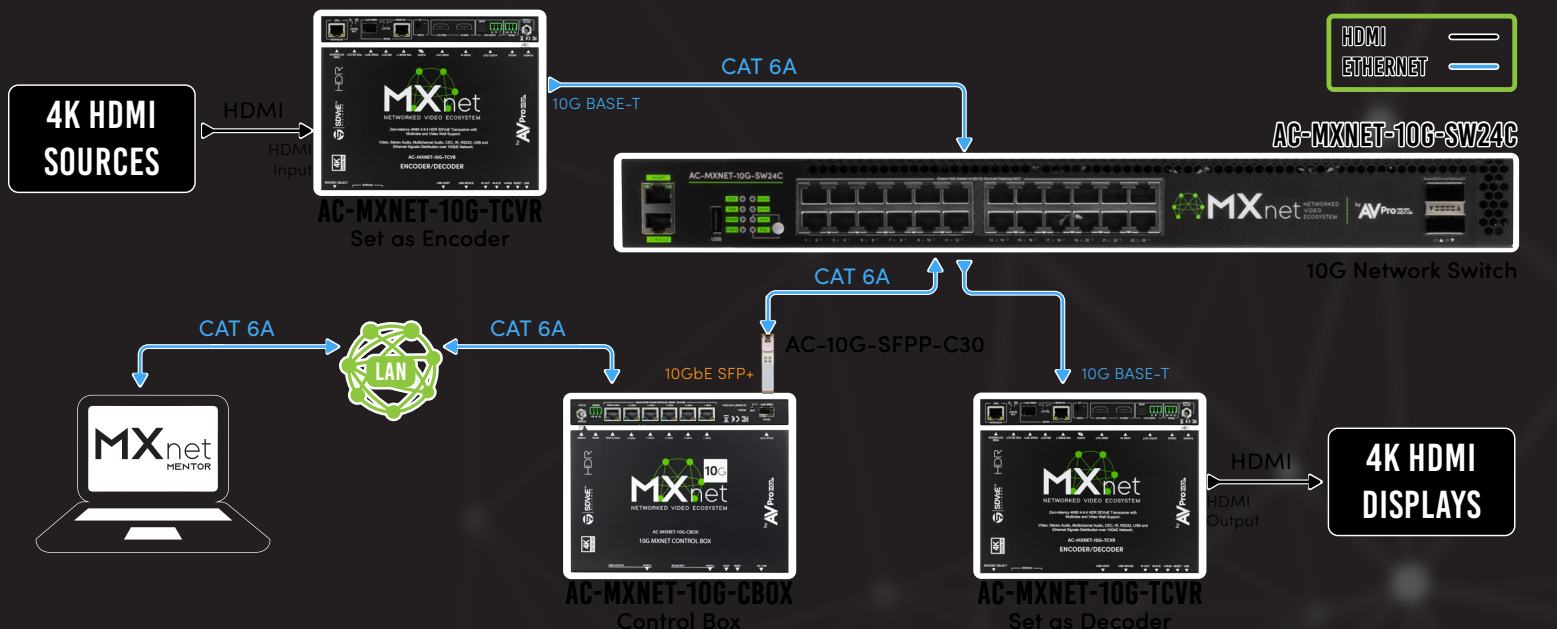
The AC-MXNET-10G-SW24C is a 24-port, 10Gbps hybrid PoE++/PoE+ (Ports 1-8 are PoE++, ports 9-24 are PoE+) network switch developed and manufactured by AVPro. The switch design seamlessly supports wide-ranging Audio/Video-over-IP applications, including SDVoE, Dante, AVPro Edge MXnet 10G, and others, using the latest Multigigabit campus-level switch chipset. Doubled up to cascade in Virtual Switch Framework mode and for operation as a singular switch with an aggregate total of 48 endpoints (16 TCVRs configured as Encoders and 32 configured as Decoders), the AC-MXNET-10G-SW24C supports plug-and-play functionality without manual configuration.

- 8 ports are PoE++ Type 3 @ 60 watts
- 16 ports are PoE+ Type 2 @ 30 watts
- 2 X 40G QSFP+ Stacking Uplink Ports
- 680Gbps Switching Capacity Headroom
- Carrier-Grade, layer 3, Mission-critical Design
- Purpose-designed and built for 10G SDVoE
- Pre-configured QoS for Dante Audio-over-IP

Purpose-designed and built to a Carrier-Grade rating for high reliability and mission-critical applications, the AC-MXNET-10G-SW24C can accommodate two hot-swappable 530-watt power supply modules for instantaneous auto-redundancy. (Note: The AC-MXNET-10G-SW24C is shipped with a single PSU).

With 24 x 10G-mGig RJ45 ports with a total bandwidth of 480Gbps and two 40Gbps QSFP+ stacking ports with 160Gbps total bandwidth, the AC-MXNET-10G-SW24C has a calculated switching capacity of 640Gbps, providing an abundant amount of headroom safety and a generous forwarding rate for high data throughput and uniform distribution of traffic for improved network efficiency.

The AC-MXNET-10G-SW24C has been pre-configured with Quality of Service (QoS) settings optimized for Dante audio streams. These settings prioritize Dante audio packets above other network traffic, reducing latency and packet loss to ensure high-quality, uninterrupted audio streaming. AVPro is the first professional AV manufacturer to implement QoS pre-configurations specifically for Dante traffic, demonstrating our commitment to enhancing audio streaming quality in residential and commercial environments.



MXnet 10G by AVPro Edge

PRODUCT SPECIFICATIONS

Ports:	
Ethernet	(24) x 10G-mGig RJ45 Ports RJ-45 Ports 1 through 8: POE++ Up to 60 Watts RJ-45 Ports 9-24: POE+ Up to 30 Watts (2) QSFP+ 40G Ports (1) x 10/100/1000BASE-T Management Port (MGMT)
HDMI	N/A
Audio	N/A
IR	N/A
RS232	(1) x RJ45 console port (Out-of-Band) (9600 baudrate)
USB	(1) x USB 2.0 Type-A for MXNet Service and storage
Distance:	
Ethernet	100 Meters/330 Feet over CAT 6a
SFP+ and Fiber	10G SFP+ AOC cable up to 3 meters, 10G SFP+ Multimode transceiver over Multimode fiber up to 550 meters 10G SFP+ Single mode transceiver over Single mode fiber up to 20 Kilometers
Environmental:	
Operating Temperature	0°C ~ 50°C
Storage Temperature	-40°C ~ 70°C
Operating Humidity	5%~95% noncondensing
Performance:	
Max SDVoE Endpoints	24 (32 with QSFP+ 4x10G Hardware Profile Mode)
Switching Capacity	680Gbps
Forwarding Rate	480Mpps
MAC ADDRESS	32K
Routing Table	16K
Jumbo Frame	16K
L3 Interface	1K
Power:	
Max Power Consumption	530W (1060W if using dual power supply) (2nd PSU Not Included)
POE Power	IEEE 802.3af (POE 15.4W) IEEE 802.3at (POE+ 30W) IEEE 802.3bt (POE++ 60W) (Only ports 1-8) Total POE Power Budget: 960W
Thermal dissipation	1812.176 BTU/hr
Power Supply Unit	AC: 100~240VAC, 50~60Hz DC: Input 48V-57V Up to two modular hot-swappable AC power supply units (only one PSU included with purchase)
Mounting	Rack mount
Dimensions:	
Height x Width x Depth (Single Unit)	Millimeters: 44 x 440 x 380 Inches: 1.73 x 17.32 x 14.96
Height x Width x Depth (Packaged)	Millimeters: 161.9 x 463.55 x 558.8 Inches: 6.375 x 18.25 x 22
Weight (Unit)	12 lbs. (5.44 kg)
Weight (Packaged)	16 lbs. (7.26 kg)
Regulatory	CE/FCC
Product Warranty	10 Years

Specifications subject to change without notice. Mass & dimensions are approximate



KEY BENEFITS

- Processing Performance:** A 680Gbps calculated switching capacity combined with a forwarding rate of 480Mpps signifies ample headroom for high data throughput and network efficiency.
- Virtual Switch Framework:** Synthesizes multiple AC-MXNET-10G-SW24C switches in the same layer into one logical device for high availability and scalability.
- Carrier-Grade Build Rating:** Carrier-Grade hardware and software design features high reliability and fail-safe redundancy capabilities for mission-critical applications, providing 99.999% uptime availability.
- Fast Switching with Near-Zero Latency:** Source-to-source switching to endpoints is virtually instantaneous if scaling is not required (100µs frame latency, or 1/150th of a frame). With scaling in use, the switching speed is between one to two frames, or about 17-34 milliseconds, considered visually imperceptible.
- Preconfigured Comprehensive QoS:** Quality of Service settings are optimized for Dante and SDVoE streams. Advanced load-balance configuration for SDVoE and MXnet applications optimize network performance by distributing high-volume data transfers and multicast streaming traffic across multiple paths to reduce congestion to optimize latency and other critical performance metrics.
- Dante Audio Prioritized:** AVPro is the first professional AV manufacturer to implement Dante-oriented QoS traffic prioritization to enhance network streaming performance in residential and commercial environments.
- Class-Leading Performance:** MXnet switches are the highest-performing switches in the AVoIP market segment.