



MXnet Essential Series 48 Port Switch (AC-MXNET-SW48E)

Purpose-built for demanding, high-density AV-o-IP environments, AVPro Edge engineered the advanced AC-MXNET-SW48E network switch to deliver cost-no-object performance, enhanced scalability, and unmatched reliability at a cost-effective price. With a powerful 740-watt PoE+ budget, the 48-port AC-MXNET-SW48E can independently and efficiently support a complete standalone MXnet 1G EVO I & II system of up to 47 endpoints plus CBOX. Its pre-configured, plug-and-play design provides setup convenience for MXnet USP, 1G, 1G Evolution II, and Dante audio, eliminating the need for complex network configuration and enabling rapid, large-scale system deployments with minimal onsite time.

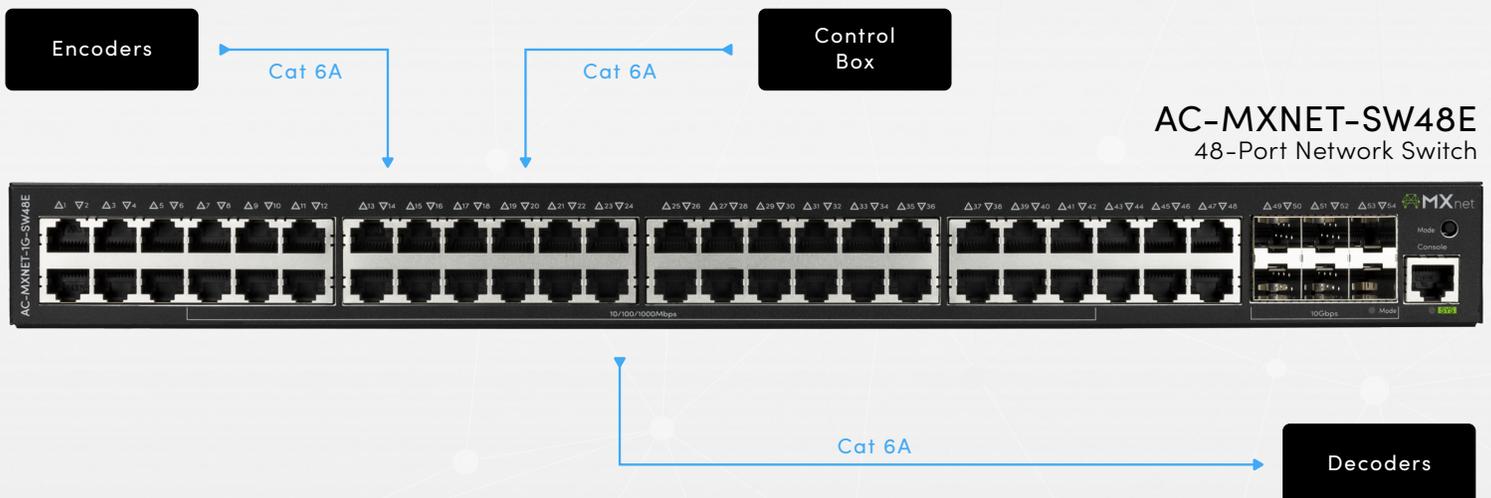
The AC-MXNET-SW48E is crafted around an OSI Layer 2.5 architecture that seamlessly blends advanced Layer 2 data link functions with select Layer 3 networking features, including optimized multicast routing. Out-of-the-box, it is pre-configured with VLAN segmentation, QoS prioritization, and IGMP snooping settings for fast and efficient system commissioning. At its core is AVPro Edge's proprietary IAVP (Intelligent A/V Processing) suite, which intelligently manages multicast processor loads to maintain exceptional AV-over-IP traffic reliability while delivering non-blocking, Layer 3-class performance for substantially less than the cost of traditional full Layer 3 switches.

As the backbone in MXnet USP systems, the AC-MXNET-SW48E allows integrators to fully leverage the advantages of MXnet USP series Essential, Plus, and Pro endpoints. Its 6 x 1 Gbps/10 Gbps expansion ports deliver up to 60 Gbps of non-blocking throughput with optimized USP bandwidth distribution, ideal for large-scale, endpoint-intensive installations such as casinos, civic centers, and government facilities. This ensures dependable operation for mission-critical applications, including real-time video walls and multi-zone routing.

The AC-MXNET-SW48E streamlines deployment with PoE+ connectivity, six 1 Gbps/10 Gbps SFP+ expansion ports for effortless scalability, and MXnet-optimized profiles that remove the complexity of manual configuration. It delivers a flexible, cost-effective solution for professional-grade network performance across commercial environments such as hospitality, retail, and healthcare, and is equally suited for luxury residential AV systems. Like all AVPro Edge products, it is backed by AVPro Edge's signature build quality and trusted reliability.



SW48E Connection Diagram



PRODUCT SPECIFICATIONS

KEY BENEFITS

PORTS	
RJ45 Ports	48x 10/100/1000Base-T PoE+
SFP Ports	6x 1G/10G SFP+
Console Port	1 x RJ45
SWITCHING	
Switching Capacity	216 Gbps
Forwarding Rate	161 Mpps
MAC Address Table	32K
Jumbo Frame Support	Up to 12,000 bytes
Hardware Queues per port	8
VLAN Support	Up to 4k VLANs
ACL Entries	1,408
HARDWARE	
Switch ASIC	Realtek RTL9311
Switch Chip Cache	2 MB
CPU	Embedded MIPS-4KEc with MMU
Memory	256 MB DDR3
Storage	32 MB SPI Flash
POWER	
Power Input	AC 100-240V, 50/60Hz
Power Supply	Internal
Maximum Power Consumption	850W
Switch Power Consumption	<30W
PoE Standard	IEEE 802.3af (PoE), IEEE 802.3AT (PoE+)
Total PoE Power Budget	740W
ENVIRONMENTAL	
Operating Temperature	0°C to 50°C (32°F to 122°F)
Storage Temperature	-40°C to 70°C (-40°F to 158°F)
Operating Humidity	5-95% non-condensing
PHYSICAL	
Rack Space	1RU
Mounting Methods	Rackmount
Product Material	Metal
DIMENSIONS	
Dimensions (Unit only Width/Depth/Height)	17.32" x 10.23" x 1.72" (440mm x 260mm x 43.6mm)
Dimensions (Packaged Width/Depth/Height)	25.35" x 21.18" x 6.38" (644mm x 538mm x 162mm)
Weight (Unit)	10.57 lbs (4.79 kg)
Weight (Packaged)	14.93 lbs (6.77 kg)
Product Warranty	10 year warranty

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

- Engineered With Cost-Effectiveness In Mind:** Advanced Layer 2.5 (L2+) architecture combines Layer 2 efficiency with Layer 3 routing flexibility for improved traffic management and support of multiple protocols. Complexity is reduced without compromising latency, scalability, or inhibiting perceptible speed, balancing performance and cost for scalable AV deployments.
- Non-blocking Architecture for USP Deployments:** A stacking bandwidth of 60 Gbps exceeds the 2.88 Gbps maximum USP endpoint capacity for congestion-free stream routing.
- 48 PoE+ Copper Ports:** Single-cable connectivity eliminates the need for external power supplies with a PoE+ budget of 740 watts, resulting in clutter-free, simplified installations with enhanced reliability and lower system costs.
- 6 x 1 Gbps/10 Gbps SFP+ Stacking Ports:** Enables 6 x 1 Gbps or 10 Gbps stacking for USP/Dante audio systems, and consolidates large endpoint counts and uplinks seamlessly to core switches or stacked racks.
- Dante Audio Prioritized:** AVPro Edge is the first professional AV manufacturer to implement Dante-oriented QoS traffic prioritization to enhance network streaming performance in residential and commercial environments.
- Pre-configured for MXnet USP, 1G V1/V2, and Dante:** Truly plug-and-play in a standalone MXnet 1G EVO I & EVO II system, with out-of-the-box MXnet USP and Dante audio protocol support. VLAN, QoS, and IGMP settings are optimized, with no additional adjustments required.

- 1 RU Compact Rack Height:** Standard AV rack mount spacing.

Note: There is an Installation Maximum of 4 Switch Hops.

