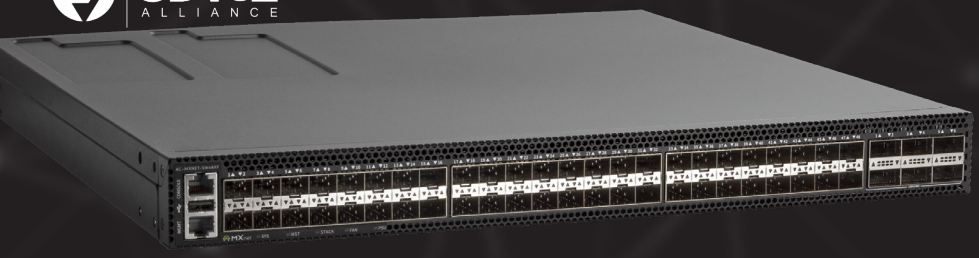
SDVoE ALLIANCE



10G MXnet
NETWORKED VIDEO ECOSYSTEM

MXNet **10**G NETWORK SWITCH

(AC-MXNET-SW48XF)

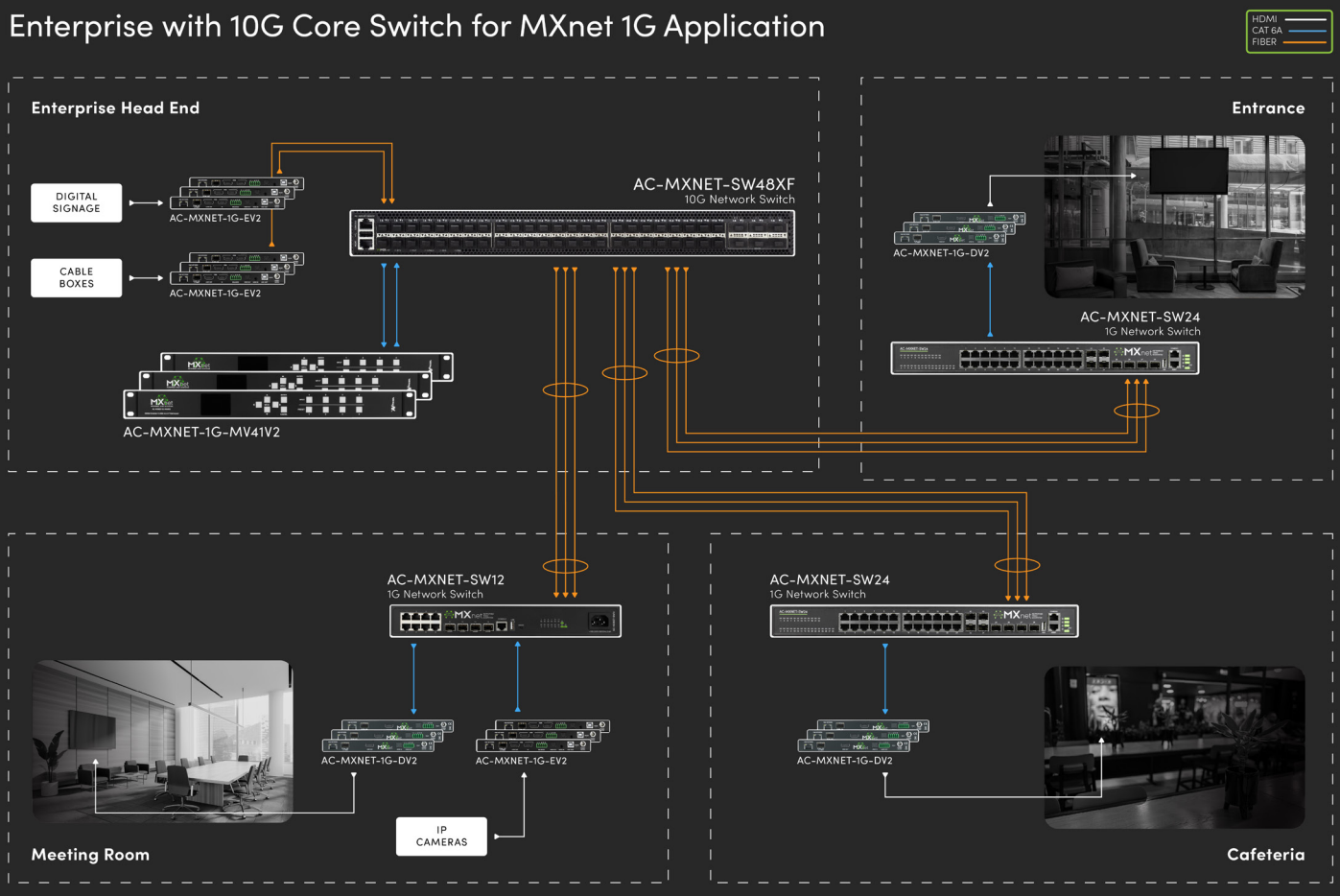
The AC-MXNET-10G-SW48XF is built for large-scale AV-over-IP environments where bandwidth, scalability, and reliability are non-negotiable. With 48× 10G SFP+ ports and 6× 100G QSFP28 stacking ports, it supports high-density SDVoE endpoint deployments that scale seamlessly from a single switch to multi-switch stacked configurations without rearchitecting the network.

Preconfigured for MXnet 10G (SDVoE) systems, the SW48XF eliminates manual setup. IGMP Snooping, VLAN segmentation, QoS, and LAG are all optimized out of the box to ensure predictable multicast performance and smooth video switching from day one.

Its full L3 switching architecture delivers 2.16 Tbps switching capacity and 600 Mpps forwarding, providing a non-blocking backbone even under full SDVoE multicast load. The 6× 100G QSFP28 ports provide 600 Gbps of stacking bandwidth exceeding the 480 Gbps maximum cross-switch SDVoE load ensuring all streams route without congestion across any supported topology. Ideal for enterprise, education, production, and government deployments, the SW48XF scales from a standalone core to a spine-connected edge switch beneath the SW32HF. Its 1RU rackmount design, hot-swappable PSUs, and redundant fans make it a reliable, serviceable choice for mission-critical AV-over-IP installations.

- 48× 10G SFP+ fiber ports
- 6× 100G QSFP28 stacking/uplink ports
- Preconfigured for MXnet 10G (SDVoE)
- IGMP Snooping, VLANs, and QoS support
- Non-blocking SDVoE (600G stacking > 480G max load)
- 2.16 Tbps switching capacity
- 1RU rackmount form factor
- Max 3 switch hops

Enterprise with 10G Core Switch for MXnet 1G Application



PRODUCT SPECIFICATIONS

PORTS:	
SFP+ Ports	48 x SFP+ Ports: 10GbE/1GbE, 10GbE by default
QSFP28 Ports	6x QSFP28 Ports: 40G/100GbE, 100GbE by default; supports 4x 25G SFP28 breakout, 4x 10G SFP+ breakout, and 40G backward compatibility
Management Port	1x 10/100/1000BASE-T Management Port (MGMT)
Console Port	1 x RJ45 console port (Out-of-Band)
USB	1 x USB 2.0 Type-A for MXnet Service and storage
SWITCHING:	
Switching Capacity	2.16 Tbps (2,160 Gbps)
Forwarding Rate	600 Mpps
MAC Address Table	32K
ARP Table	8K
Routing Table	30K
Jumbo Frame Support	Up to 10,000 bytes
Hardware Queues	8 per port
VLAN Support	Up to 4,096 VLANs
ACL Entries	Hardware-accelerated L2/L3/L4 ACLs
HARDWARE:	
Switch ASIC	Marvell Aldrin2 98DX8548/24
Switch Chip Cache	6 MB
CPU	External ARMv8 Cortex-A72 2.2GHz Quad-core
Memory	DDR4 4 GB
Storage	SPI Flash 32 MB + MMC 8 GB
POWER:	
Power Input	AC 100-240V, 50/60Hz
Power Supply	1+1 Modular Redundant Hot-Swappable AC
Maximum Power Consumption	350W per PSU
Switch Power Consumption	109W (single PSU) / 120W (dual PSU) at full load
ENVIRONMENTAL:	
Operating Temperature	0°C to 45°C (32°F to 113°F)
Storage Temperature	-40°C to 70°C (-40°F to 158°F)
Operating Humidity	5-95% non-condensing
Cooling	3+1 Redundant Hot-Swappable Fans with Front-to-Back Airflow
PHYSICAL:	
Rack Space	1RU
Mounting Methods	Rackmount
Product Material	Metal
DIMENSIONS:	
Dimensions (Unit only Width/Depth/Height)	17.32" x 10.24" x 1.72" (440 mm x 260 mm x 43.6 mm)
Dimensions (Packaged Width/Depth/Height)	25.35" x 21.18" x 6.38" (644mm x 538mm x 162mm)
Weight (Unit)	8.13 lbs (3.69 kg)
Weight (Packaged)	10.13 lbs (4.59 kg)
Product Warranty	10 year warranty
Specifications subject to change without notice. Mass & dimensions are approximate	

KEY BENEFITS

- **48× 10G SFP+ Ports:** Connect high-density MXnet SDVoE encoders, decoders, and control devices across a single non-blocking fiber switching fabric.
- **6× 100G QSFP28 Ports:** Enable high-speed stacking, backbone uplinks, or breakout to 4× 25G / 4× 10G for flexible multi-switch expansion.
- **Preconfigured for MXnet:** Plug-and-play setup with VLAN, QoS, IGMP, and LAG optimized out of the box for SDVoE deployments.
- **Full L3 Switching Architecture:** Delivers enterprise-grade routing with OSPF, BGP, MPLS, and VRF for AV-over-IP and IT network convergence.
- **Non-Blocking for SDVoE:** 600 Gbps stacking bandwidth exceeds 480 Gbps maximum cross-switch SDVoE load (1.25× headroom).
- **Edge-to-Core Flexibility:** Deploys as a standalone core, distribution switch, or edge switch beneath the SW32HF — no network redesign required.
- **1RU Rackmount Design:** Clean, professional installation in AV racks and network closets with front-to-back airflow.





