



MXnet 1G Evolution II USB 2.0 over IP Extension

(AC-MXNET-1G-HEX-UV2)
(AC-MXNET-1G-DEX-UV2)



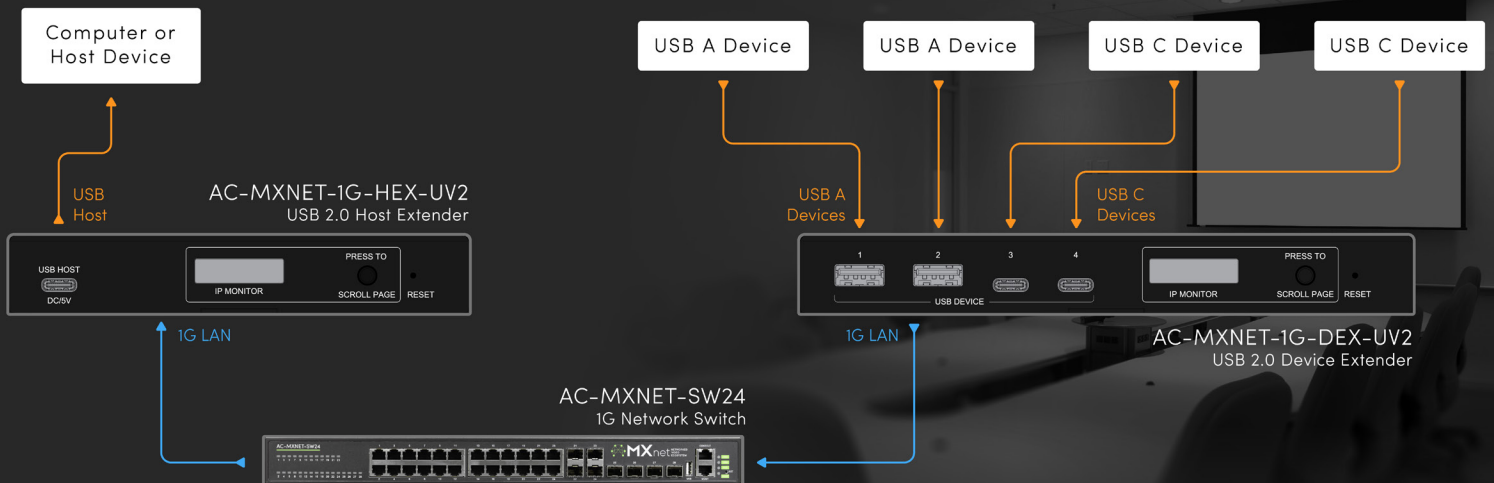
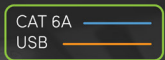
The AC-MXNET-1G-HEX-UV2 and AC-MXNET-1G-DEX-UV2 are a USB 2.0 over IP transmitter and receiver designed to extend host connectivity across an MXnet network. This solution enables integrators to route USB signals over standard 1G Ethernet infrastructure, eliminating the limitations of point-to-point USB extension methods like HDBaseT or fiber.

With a USB-C host port, the HEX supports modern host devices while providing futureproof connectivity. It delivers high-speed data transfer for HID peripherals such as keyboards, mice, and game controllers, as well as bandwidth-intensive devices like PTZ cameras, microphones, and external storage.

By leveraging IP-based architecture, the DEX enables scalable deployments where multiple endpoints can be routed and managed through MXnet's CBOX/Mentor platform. This approach eliminates the limitations of traditional USB extension, allowing integrators to create dynamic systems for enterprise, education, medical, and command-and-control applications.

PoE support ensures streamlined power delivery, while the integrated OLED display provides essential device information for quick setup and maintenance. With fiber-ready SFP connectivity and fanless cooling, these products are optimized for silent operation and long-distance installations, making it an ideal choice for professional AV environments.

MXnet 1G USB 2.0 Host and Device Extension Diagram



PRODUCT SPECIFICATIONS

KEY BENEFITS

USB DATA RATES	
Max Write Speed (Mbps)	228.7 Mbps
Max Read Speed (Mbps)	158.8 Mbps
Avg Write Speed (Mbps)	226 Mbps
Avg Read Speed (Mbps)	154.4 Mbps
INGESTION	
Signal Type	USB 2.0
PORTS	
Ethernet	(1) x female RJ45, PoE
SFP	(1) x SFP slot
USB	DEX (2) x USB-A device ports (2) x USB-C device ports (1) x USB-C service port
	HEX (1) x USB-C device port (1) x USB-C service port
DISTANCE	
Ethernet	100 Meters/ 330 Feet over CAT5e and above
SFP and Fiber	1000BASE-SX SFP Transceiver Module (MMF, 850nm, 550m, LC, DOM) 1000BASE-LX/LH SFP 1310nm 10km Transceiver Module
ENVIRONMENTAL	
Operating Temperature	23 to 125°F (-5 to 51°C)
Storage Temperature	-4 to 140°F (-20 to 60°C)
Operating Humidity	5-90% RH (No Condensation)
Cooling	Fanless Cooling
Acoustic Noise Level	0dB
POWER	
Max Power Consumption	HEX: 1.8W DEX: 6.5W
PoE (Power over Ethernet)	IEEE 802.3af (15.4W)
Power Supply Unit	HEX: Input: AC 120-240V-50/60Hz 0.8A Output: DC 5V 0.5A
	DEX: Input: AC 120-240V-50/60Hz 0.8A Output: DC 12V 2A"
DIMENSIONS	
Dimensions (Unit only Width/Depth/Height)	HEX 4.75 x 3.19 x 0.81 in 120.65 x 80.96 x 20.64 mm
	DEX 6.31 x 3.97 x 0.81 in 160.34 x 100.81 x 20.64 mm
Dimensions (Packaged Width/Depth/Height)	HEX & DEX 8.69 x 5.75 x 1.31 in 220.66 x 146.05 x 33.34 mm
Weight (Unit)	HEX: 0.59 lbs / 0.27 kg DEX: 0.93 lbs / 0.42 kg
Weight (Packaged)	HEX: 0.97 lbs / 0.44 kg DEX: 1.23 lbs / 0.56 kg
Regulatory	CE/FCC/UL
Product Warranty	10 Years

- Scalable USB-over-IP Architecture**
 Extend and route USB 2.0 signals across the network, enabling flexible placement of hosts and peripherals for AV, KVM, and control applications.
- Interoperability with MXnet V2 Mix USB-only endpoints with AV-over-IP devices for cost-effective deployments without sacrificing functionality.**
- Modern Connectivity Options**
 HEX includes a USB-C port for connecting a host device, while DEX offers two USB-A and two USB-C ports for a wide range of peripherals, from webcams to storage drives.
- Enhanced Data Rates for Isochronous Devices**
 Engineered for demanding peripherals, ensuring smooth performance for unified communications and media capture.
- Power over Ethernet (PoE)**
 Reduces cabling complexity and eliminates external power bricks, improving reliability and installation speed.
- Integrated OLED Display**
 Displays IP address, MAC address, and custom naming for quick troubleshooting and device management.
- Fiber-Ready with SFP Slot**
 Supports long-distance deployments up to 10 km using fiber transceivers.
- Silent, Fanless Cooling**
 Ideal for conference rooms, classrooms, and other quiet environments.



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