

UMC Series

Fast Ethernet and Gigabit USB Media Converters



Allied Telesis UMC200 and UMC2000 USB media converters are the perfect fit for today's USB-A technology, as well as for next-generation USB-C specifications. This allows the UMC200/2000 Series to take advantage of technology in both older and newer notebooks, desktop PCs and digital devices.

Overview

The current standard USB connector is USB Type-A. Even as the world has moved from USB 1 to USB 2 and on to modern USB 3 devices, that connector has stayed the same. Since it only plugs in one way, it has always been necessary to make sure it is correctly oriented before plugging in.

However, with USB-C, both ends of the cable are the same, allowing for reversible plug orientation. It can also be plugged in upside down as it will function both ways.

The time of differently-shaped connectors for differently-sized devices is coming to a close. USB Type-C is a new connector standard, and it is very small—about one third the size of the old USB Type-A plug.

The UMC Series comes with two types of USB cables, allowing for use with older USB-A and the new USB-C products.

Extended network

UMC Series converters are ideal for extending a fast Ethernet or Gigabit network. The series is designed to be a mobile system to extend the distance of a network by utilizing a USB-A or USB-C port with connectivity to fiber-optic cabling. The UMC Series features a USB port (Type A or C) and either a fixed fiber port (SC, ST or LC) or an SFP port which is capable of accepting a 100MB or 1000MB SFP.

VLAN support

Many new backbone switch products now support the industry-standard IEEE 802.1Q specification for Virtual LANs (VLANs), which send extra-long data packets on the network.

Some media converters don't support this feature and discard extra-long packets—but UMC200/2000 converters are fully compatible with these long packets, making them the perfect solution for today's modern networks.

Small and flexible

The small size and external power of the UMC Series allows them to be used almost anywhere.

Key Features

- Supports both USB-C and USB-A ports
- Suspend mode and remote wakeup via link-change, Magic Packet and Microsoft wakeup frame
- Power management offload (ARP and NS)
- Dynamic power management to reduce power dissipation during idle or light traffic
- Auto-detach power saving. Soft-disconnected from USB host when Ethernet cable is unplugged
- Advanced link-down power saving if Ethernet cable is unplugged
- IPv4/IPv6 packet Checksum Offload Engine (COE) to reduce CPU loading, including IPv4 IP/TCP/UDP/ICMP/IGMP & IPv6 TCP/UDP/ICMPv6 checksum check and generation
- TCP Large Send Offload V1
- IEEE 802.1P Layer 2 priority encoding and decoding
- IEEE 802.1Q VLAN tagging and 2 VLAN ID filtering; received VLAN Tag (4 bytes) can be stripped off or preserved
- Jumbo frames up to 4KB
- SP version supports both 100MB and Gigabit SFP's

	Fiber Type	Fiber-Optic Diameter	Optical Wavelength	Launch Power		Receive Power			Max Distance
				Min	Max	Min	Typical	Saturation	
UMC200	MMF	62.5/125	1310 nm	-20 dBm	-14 dBm	-32 dBm	-34 dBm	-3 dBm	2 km
UMC2000	MMF	50/125	850 nm	-9.5 dBm	-4 dBm	-17 dBm	-20 dBm	-3 dBm	500 m
	MMF	62.5/125	850 nm	-9 dBm	-4 dBm	-17 dBm	-20 dBm	-3 dBm	220 m

SPECIFICATIONS

Status LEDs

- USB
 - ON Link is operating at SuperSpeed
 - OFF Link is not operating at SuperSpeed
- LAN fiber port
 - ON Fiber link is established
 - OFF No Link
 - Blinking LAN Activity

Physical Specifications

- Dimensions 5.49 cm × 10.16 cm × 2.18 cm
(W × D × H) 2.16 in × 4 in × 0.86 in
- Weight 170 g (6 oz)

Power Characteristics

- USB-C USB connector, 5VDC
- Powered from a PC USB port

Environmental Specifications

- Operating temperature 0°C to 50°C (32°F to 122°F)
- Operating humidity 5% to 95% relative humidity (non-condensing)
- Storage temperature -30°C to 70°C (-22°F to 158°F)
- Storage humidity 5% to 95% relative humidity (non-condensing)
- Altitude Up to 3048 m (10000 ft)

Electrical and Mechanical Approvals

- Safety UL60950-1
EN60950-1
- Emissions (EMI) FCC Class A
EN55022
EB55032
CISPR 22 Class A
C-TICK
VCCI

ORDERING INFORMATION

AT-UMC200/SC-901	USB (-A or -C) to 100FX/SC Fast Ethernet multimode mini media converter, TAA Compliant
AT-UMC200/ST-901	USB (-A or -C) to 100FX/ST Fast Ethernet multimode mini media converter, TAA Compliant
AT-UMC2000/SC-901	USB (-A or -C) to 1000SX/SC Gigabit multi-mode mini media converter, TAA Compliant
AT-UMC2000/LC-901	USB (-A or -C) to 1000SX/LC Gigabit multi-mode mini media converter, TAA Compliant
AT-UMC2000/SP-901	USB (-A or -C) to SFP (100MB or Gigabit) Mini media converter. TAA Compliant