

VMC-Media-Converter

Ref.VMC291020K



Overview

VMC Series Gigabit Ethernet Media Converters with external Power supply are designed to transmit and receive 10/100/1000Mbps data Over optical fiber. The electrical interface will Auto-Negotiate to a 100 Mbps or 1000Mbps Ethernet rate without any adjustments. The optical interface Operates at a 1000 Mbps Ethernet rate. Both are environmentally hardened to Operate in extreme temperatures. LED indicators are provided for confirming Equipment operating status.

Features

- 10/100/1000Mbps Ethernet
- 10/100/1000 BASE-T/TX electrical port
- 1000 BASE-SX/LX optical port
- Electrical port supports Auto-Negotiation for 100Mbps or 1000Mbps, full duplex or half duplex data.
- Optical port supports 1000Mbps full duplex data
- Automatic MDI/MDI-X crossover
- Distances up to 2km for Multimode; Up to 120km for Single mode
- Voltage transient protection on all power and signal input. Output lines provides Unconditional protection from power surges and other voltage transient events
- No in-field optical adjustments required
- LED Indicators

Applications

- Access Control Systems
- Building and Environmental Control Systems
- Tamper Switch
- 10/100/1000 Mbps Ethernet Media Converter

High Speed Computer Links

Fiber connections

The **VMC** range of Fast Ethernet media converters provides a Complete family of conversion devices, allowing users to extend the size of UTP networks with the use of fiber Cabling. Supporting SC fiber connectors, **VMC** Converters can be used to extend Networks with up to 2 km of Multi-mode fiber or 60 km of single mode fiber.

Standalone or rack mounted

Each small media converter is powered by an external power supply Unit for use in standalone applications. Where multiple media converters Are being used, up to 12 standalone Devices can be inserted into a low cost Rack mounts chassis, allowing all The converters to be powered by a Single internal power supply. In critical applications, a second load sharing internal power supply can be installed into the rack mount chassis.

Link test

The link test is a fast and easy way for Youto tests the connections between the media converter ports and the end nodes that are connected to the ports. If a network problem occurs, you can perform a link test to determine which port is experiencing a problem, and be able to focus your troubleshooting efforts on the cable or end Node where the problem resides.

MissingLink™

The MissingLink feature enables the two ports on the media converter to pass the "Link" status of their connections to each other. When the media converter detects a loss of connection to an end node, the mediaconverter shuts down the connection to the other port, thus notifying the end node that the connection has been lost.

Specifications

Status Indicators

Power Indicates power is applied to the converter Link (2) Indicates a valid receive link exists Activity (2) Indicates TX/RX on the port ML Indicates Missing Link

Switches

ML - link Test Enable MissingLink
A/N Enable auto-negotiation

Packet Transmission Characteristics

Round trip delay 0.4µs maximum
Bit Error Rate (BER) <10⁻¹²

Power Requirement

AC 100-240V 50/60Hz 0.15A Max

Transmission

Distance
Multimode: 2km
Single mode: 10km~120km

Port

Optical: 2 Fibers (SC/ST/FC Optional)
Power: Terminal Block

Electrical: RJ45

Led Indicators

Optical Link/Data Activity

Electrical Link/Data Activity

MDI/MDI-X

Auto selection

Mac address table

4K

Memory buffer

256K

Jumbo Frame

9216 bytes

Data Data Interface: Ethernet

Data Rate: 10/100/1000 Mbps

Power Supply

External: 5V DC 2A

Built-in: 100 V to 240 V AC 50Hz to 60 Hz

Power Consumption: ≤5W

Operating Temperature

0 °C to +70 °C

Storage Temperature

-20 °C to +80 °C

Relative Humidity

5% to 90% (non-condensing)

MTBF: >100,000 hours

Dimensions

95mm * 70 mm * 25mm

Net Weight

0.165 kg

Emissions

FCC, Class A, RoHS, CE Mar

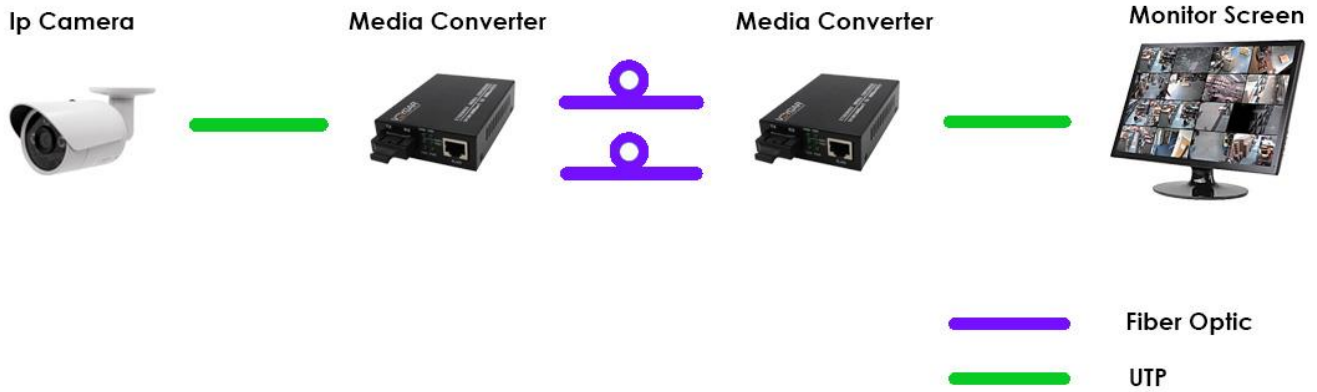
Standards

IEEE 802.3 10Base-T

IEEE 802.3u 100Base-TX

IEEE 802.3ab 1000Base-TX/FX

Application Diagram



Fast Ethernet Application:



Gigabit Ethernet Application:

