

## **Product Description**

The Maxcom Industrial Ethernet switch/media converter series uses the latest IC technology from the USA, with highly stable performance, high quality and reliability in harsh environments. Used to convert copper ethernet data to fiber optic signals and vice versa at speeds of 10/100/1000Mbps. Units are available as standalone modules that can be wall mounted or DIN-Rail mounted. Unmanaged, plug and play, no configuration, easy to use. Available in several configurations, optional POE, one or two SFP slots and one to eight RJ45 ports. Built for Maximum Reliability.

### **Product Features**

- \* Ports: 10/100/1000Mbps RJ45's with Auto Uplink, and 1000Mbps SFP Slots
- \* Automatic MAC address learning and aging
- \* Automatically supports IGMP (Multicasting)
- \* 10/100/1000Mbps Auto-negotiation, auto-MDI-MDI-X
- \* LED indicators for monitoring power/link/activity
- \* Supports 10/100/1000Mbps-Full/Half-duplex
- \* Supports Wall-mount and DIN-Rail installation
- \* Super lightening protection, IP40 protection.
- \* Excellent heat elimination without cooling fan.
- \* Flexible powering 12 ~ 48Vdc \*(48Vdc with POE)
- \* Harsh industrial environments
- Operating temperature range -45<sup>~</sup> 85<sup>~</sup>C (-40 ~ +167 F)



# **Ordering Information**

MXi-SFP0101G 10/100M/1000M, (1) SFP to (1) RJ45

1 RJ-45

MXi-SFP0104G 10/100M/1000M, (1) SFP to (4) RJ45

1 4 RJ-45

MXi-SFP0108G 10/100M/1000M, (1) SFP to (8) RJ45

1 8 RJ-45

MXi-SFP0204G 10/100M/1000M, (2) SFP to (4) RJ45

2 SFP RJ-45

MXi-SFP0208G 10/100M/1000M, (2) SFP to (8) RJ45

2 SFP RJ-45

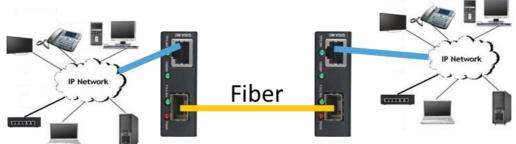
POE Option: Add "POE" to the end of part numbers above

POE

DIN Rail: Part# MXi-DIN19-1R - Optional 19" 1RU DIN Rail

Power Supply: Flexible devices work with External DC power between 12~56 Vdc \*If ordering with POE option, use a 48~56 Vdc power supply (See price sheet for models and options)

# **Typical Application:**



**Example Application** 





# **Specifications**

#### **Standards**

**IEEE Ethernet Standards** 

IEEE802.3, IEEE802.3u, IEEE 802.1ab, IEEE 802.3x, IEEE 802.3ad, IEEE 802.3z IEEE 802.1d, IEEE 802.1p, IEEE802.1q IEEE 802.1w, IEEE 802.1s, IEEE 802.1x

#### Ports

10/100/1000M Base-T RJ-45 1000MBase-X SFP (\*note 1) 1~8 ports 1~2 ports

\*Model specific:

Store-and-forward \*All Models

4.0 Gbps \* MXi-SFP0101G

12.0 Gbps \* MXi-SFP0104G

12.0 Gbps \* MXi-SFP0108G

1 Mbps \* MXi-SFP0101G

2 Mbps \* MXi-SFP0104G

Cat3,4,5 UTP(\*100 meter)

#### **Switch Performance**

Architecture Bandwidth

Buffer

#### **Twisted Pair Transmission**

10BASE-T 100BASE-TX

Cat5 or later UTP(\*100 meter)
3C,CE, ,FCC, RoHS

### Certification

#### Mechanical

Enclosure Dimension (W\*L\*H) (1~4 RJ45 ports) Dimension (W\*L\*H) (8 RJ45 ports)

Weight

lp40

130mm \* 94mm \* 36mm 158mm \* 118mm \* 42mm

0.5KG

\*1. SFP slots support SMF, MMF, BiDi, CWDM, DWDM SFP modules.

#### **Mechanical properties**

IEC60068-2-6 (anti vibration) IEC60068-2-27 (anti shock) IEC60068-2-32 (free fall)

#### **Anti-surge / Protection Level**

Anti-surge:4KV 8/20us; Protection Level:IP40 IEC61000-4-2ŁESDŁ\*8kV Contact Discharge, \*15kV IEC61000-4-3ŁRSŁ10V/mŁ80~1000MHzŁ

IEC61000-4-4½EFT½Power Line: "4kV; Data Line: "2kV IEC61000-4-5½Surge½Power Line,CM"4kV/DM"2kV ½ 100A/m Continued; 1000A/m,1s to 3s

IEC61000-4-9 (Pulsed Magnetic Field) 1000A/m IEC61000-4-10 (Damping Oscillation) 30A/m ,1MHz IEC61000-4-

12/18 (SHOCKWAVE) CM 2.5kV, DM 1kV IEC61000-4-16 (Common Mode Conduction) 30V Continued; 300V,1s FCC

Part 15/CISPR22ŁEN55022ŁClass A IEC61000-6-2(General Industry standard)

#### Power

DC Power Input: 12 ~ 48Vdc (48 Vdc with POE)
Power Consumption < 12W (without PoE output)
Power Consumption: Add 30 watts for each POE port
Overload Current Protection Yes
Reverse polarity protection Yes

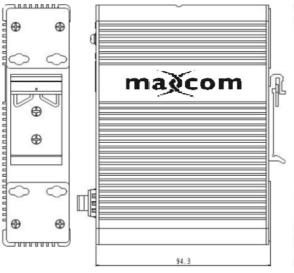
#### PoE

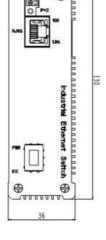
Standard IEEE802.3af/at PSE Type End-span Power Pin Assignment 1 / 2 (+), 3 / 6 (-) Power Output (2) Each port up to 30W

#### **Environmental**

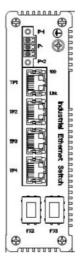
Operating Temperature -40 ~ +167 Degree F
Storage Temperature -40 ~ +185 Degree F
Operating humidity 5%~95% non-condensing

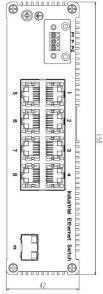
# **Configuration Examples:**



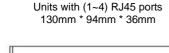


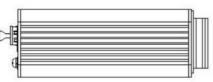


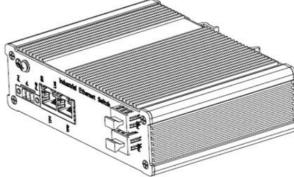




Units with (8) RJ45 ports 158mm \* 118mm \* 42mm









## Simple and Neat Industry Standard DIN Rail Mountable





### **Optional DIN Rail Available:**



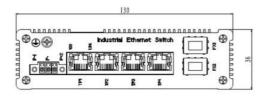


### **Power Supplies:**

Maxcom Industrial Grade Media Converters are flexible and will operate with any DC power supply between 12~57 Vdc \*(48~57 Vdc if using POE option).



Maxcom Industrial Fiber Optic Media Converters are robustly designed to support hardened temperature ranges of -40° to 167°F. These Industrial Media Converters are available as standalone modules that can be wall mounted, DIN-Rail mounted or installed in a variety of rack-mount chassis.



Units with (1~4) RJ45 ports 130mm \* 94mm \* 36mm

**OPTIONAL POE** 

Description of the production of the production

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PLUG AND PLAY
SFP SLOTS SUPPORT
INDUSTRY STANDARD 1GIG

Maxcom Supplies SFP's in a variety of types and distances, however these media converters are agnostic and will host other manufacturer SFP's.

- Single Mode Fiber and Multimode Fiber SFP's
- Distances of 2km, 40km, 80km, 120km and up to 160km SFP's
- DWDM, CWDM wavelength SFP's
- Single Fiber BiDi SFP's

