User Manual: PC-PMC101-GME
# Industrial Media Converter

Version 4.2020

Introduction

This true mini, Hardened Industrial Media Converter is designed for critical but space-limited outdoor CAM enclosure. It can be powered by wide range VDC. With its multi-purpose design, it can also be Din-Rail or wall mounted. It is an ideal unit for IP surveillance, traffic monitoring and Security applications in critical environments. It can tolerate -40°C to 75°C in harsh environments to connect a reliable network.

Installation package

This unit can be din-rail mounted or wall-mounted. Din-rail brackets and wall-mount brackets are included.

Wall Mount Bracket x 2

Din Rail Bracket x 1

Philips Head Screw x 4

3-pin Terminal Block x 1
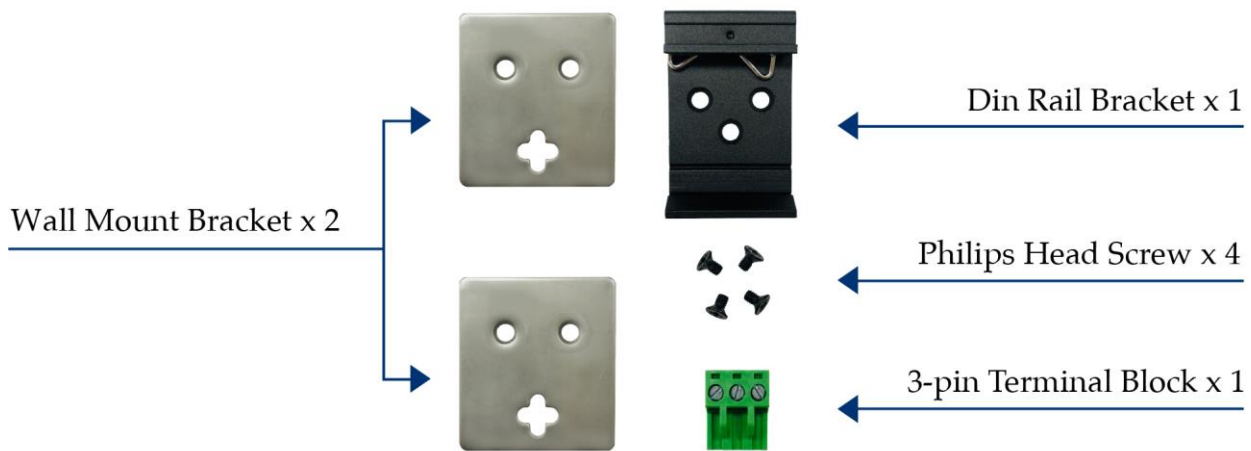
Power connection

This unit provides a 3 pin terminal block. It can be operated using either VDC power sources. The VDC power range is from 48VDC to 56VDC. Always make sure your input voltage is within this supported voltage range.

To connect power: Follow the printed polarity for V+, V- and Ground. Connect positive wire to V+, connect negative wire to V- and also connect neutral wire to ground.

Power connecting procedure:
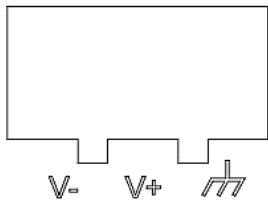
STEP 1 – Pull out 3 pin terminal block.
STEP 2 – Connect wire to V+, V- and Ground.
STEP 3 – Connect SFP fiber wire to fiber port.
STEP 4 – Plug back 3 pin terminal block to its place.

V-   V+

WARNING -- Always SHUT OFF power source to connect power wire.
WARNING -- DO NOT force SFP fiber into SFP housing without removing terminal block
WARNING -- Any exceeded input voltage will not make this unit function and may damage this unit.
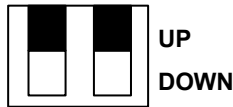
Dip Switch Function

This unit is equipped with dip switches, located on the front panel. Adjusting the dip switches will change the default function of this unit. This unit has set to manufacturer default as: SFP speed 1000M and LFP function OFF.

The table shown as you may change the dip switch setting to your desired environment.

100|LFP UP DOWN 1000|OFF	DIP 1	UP	100M
		DOWN	1000M (default)
	DIP 2	UP	LFP enabled
		DOWN	LFP disabled (default)

LED indicator

PWR (Green)
ON – Power is detected
OFF – Power is not detected

Industrial Gigabit Media Converter

100|LFP
1000|OFF

LNK   POE

PWR

LK/Act

V-   V+

Fiber Port

LK/Act (Green)
ON – Fiber port is detected
Flashing – Fiber data is transmitting/receiving

POE (Amber)
ON－PSE is activated and PD is detected
OFF – PD is not detected

TX (Green)
On – TX port is detected
Flashing – TX data is transmitting/receiving

Specifications

IEEE Standard	IEEE 802.3 10Base-T Ethernet IEEE 802.3u 100Base-TX Fast Ethernet IEEE 802.3ab 1000Base-T Gigabit Ethernet IEEE 802.3z 1000Base-X Gigabit Ethernet IEEE 802.3x Flow Control and Back Pressure, IEEE 802.3af for POE IEEE 802.3at for POE+
Switch Architecture	Back-plane (Switching Fabric): 4Gbps
Data Processing	Ports speed are the same: Converter mode Ports speed are not the same: Switch mode (store and forward)
Flow Control	IEEE 802.3x Flow Control and Back Pressure
Jumbo Frame	16KB
MAC address Table Size	1K
Packet Buffer Size	512Kbits
Network Connector	1 x RJ-45 10/100/1000 Base-T(X) Auto MDI/MDI-X function, Full/Half duplex 1 x 100/1000 BaseX SFP
Network Cable	UTP/STP above Cat.5e Cable EIA/TIA-568 10-ohm (100m) Fiber Cable (Multi-mode):50/125um,62.5/125um Fiber Cable (Single-mode): 9/125um
Protocol	CSMA/CD
LED	PWR (Green): ON－Power is detected 　　　　　　　　OFF－Power is not detected SFP Lnk/Act (Green): ON－FX port is detected 　　　　　　　　Flashing－FX data transmitting/receiving RJ-45 port: Lnk/Act (Green): ON－TX port is detected 　　　　　　　　Flashing－TX data is transmitting PoE (Amber): ON－PSE is activated and PD is detected
DIP Switch	DIP 1: UP－SFP speed 100M 　　　　DOWN－SFP speed 1000M (Default) DIP 2: UP－LFP enabled 　　　　DOWN－LFP disabled (Default) Link Fault Pass Through (LFP) is when copper side signal lost or disconnect, fiber side link signal will actively off, when fiber side signal lost or disconnect, copper side link signal will also actively off.

Reserve polarity protection	Present
Overload current protection	Present
Power Input	48V-56VDC
Power Consumption	1.92W full load without POE at 48VDC 30W Max with POE at 56VDC
PoE power	PoE power per port 30watts Supports IEEE802.3af/at
Removable Terminal Block	3 pin contact terminal block for power input Wire range: 0.34mm^2 to 2.5mm^2 Solid wire (AWG):12-24/14-22 Stranded wire (AWG): 12-24/14-22 Torque:5lb-In/0.5Nm/0.56Nm Wire Strip length: 7-8mm
Operating Temperature	-40°C to +75°C
Operating Humidity	5% to 95% (Non-condensing)
Storage Temperature	-40°C to 85°C
MTBF (mean time between failure)	561,556 hrs (Telcordia (Bellcore), GB) at 50°C
Housing	Rugged Metal, IP30 Protection
Case Dimension	59x36x49mm (LxWxD)
Installation	DIN Rail or Wall Mount options included

Certifications

Safety	LVD(EN60950-1)
EMC	CE, FCC, EN 55032/24
EMI	CISPR 32, FCC Part 15B Class A
EMS	IEC 61000-4-2 ESD: Contact: 6KV; Air: 8KV IEC 61000-4-4 EFT: Power: 2KV; Signal: 2KV IEC 61000-4-5 Surge: Power: 2KV; Signal: 2KV
Vibration	EN 60068-2-6
Shock	EN 60068-2-27
Free Fall	EN 60068-2-32

Housing Dimension (mm)
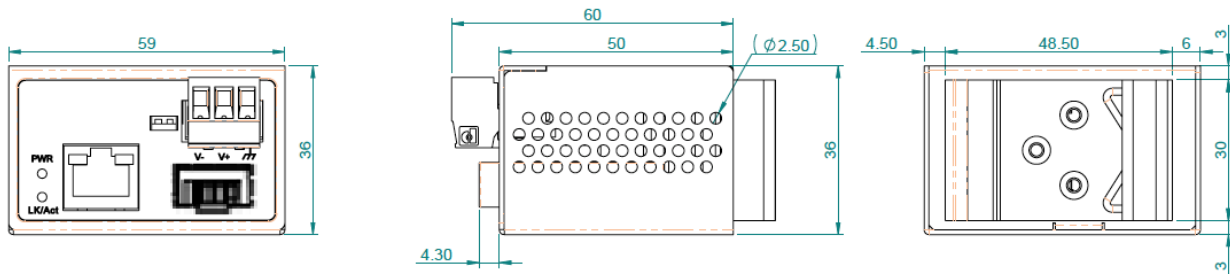
NOTE:

Housing dimension is for the purpose of showing product Length, Width, Height, din-rail, and terminal block's position and dimension. Please reference the LED Indicator Page for correct port order.