User Manual: PC-MC-101-xy
Industrial Media Converter

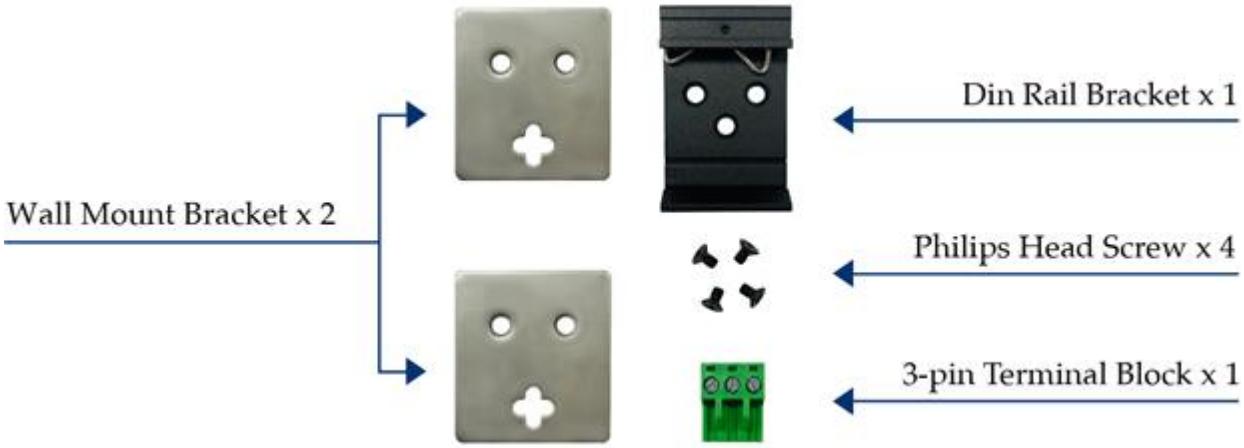
Version 6.2019

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 VAC, VDC or external DC power adapter. This unit can be either din-rail or wall mounted, both options are both included. 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-mounted brackets are included.



Power connection

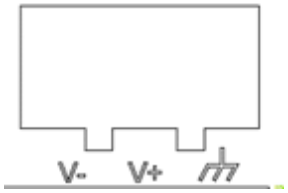
This unit provides a 3 pin terminal block. It can be operated using either VAC or VDC power sources. The VDC power range is from 12VDC to 60VDC, and the VAC power range is from 18VAC to 36VAC. Always make sure your input voltage is within this supported voltage range.

WARNING *-- Any exceeded input voltage will not make this unit function and may damage this unit.*

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.

Relay: This unit includes an additional 24V@1A relay circuit for special purpose. When 2 powers are connected, the relay is in OPEN mode. If only one of the power sources is connected, the relay changes to SHORT mode. This relay will only work with PW1 and PW2. It is independent from PW3.

Power connecting procedure:



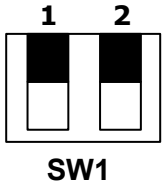
STEP 1 – Pull out 3 pin terminal block.
STEP 2 – Connect wire to V+, V- and Ground.
STEP 3 – Connect SC/SFP/WDM fiber wire to fiber port.
STEP 4 – Plug back 3 pin terminal block to its place..

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.

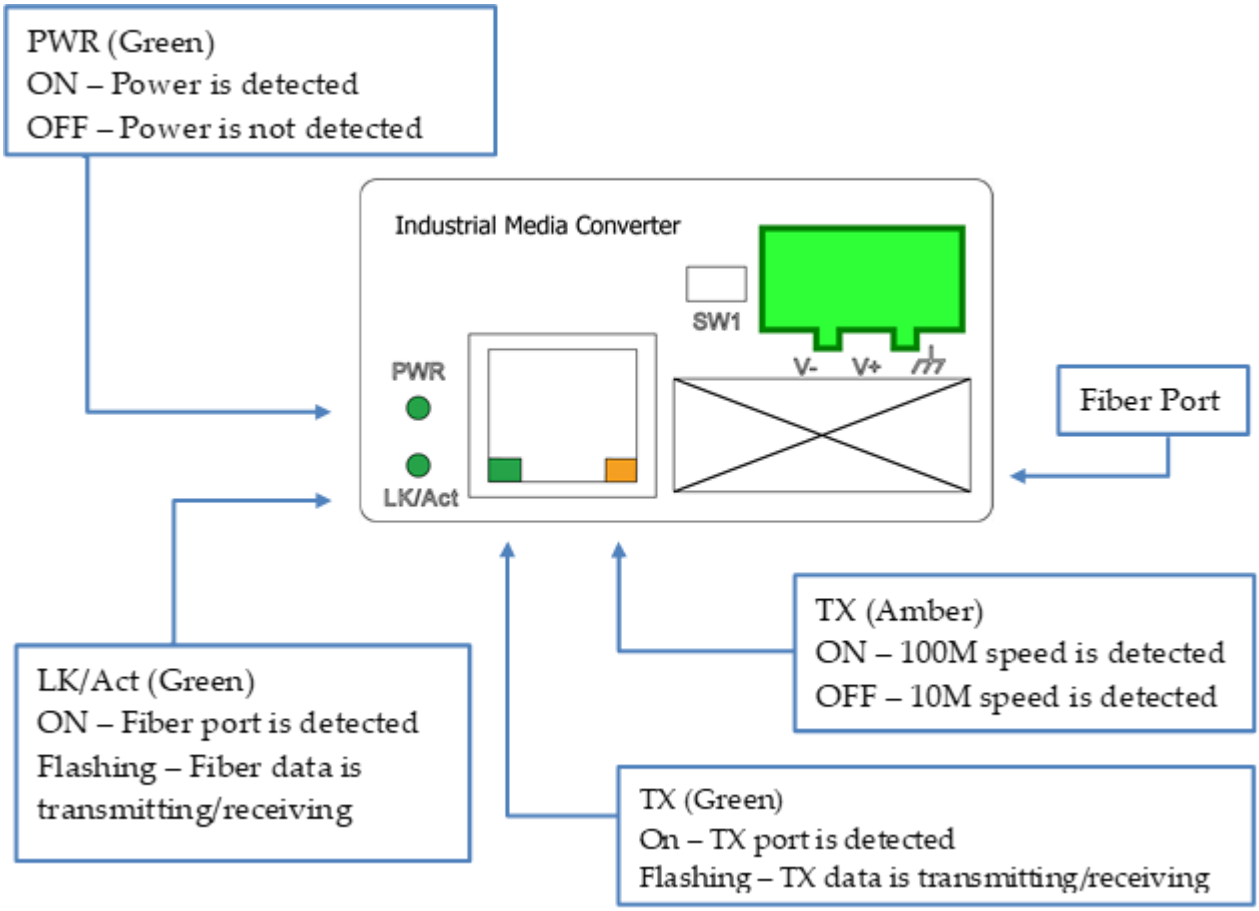
Dip Switch Function

This unit is equipped with dip switches, located on the front panel marked as SW1. Adjusting the dip switches will change the default function of this unit. This unit has set to manufacturer default as: Switch Mode ON and LFP function OFF.

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

	**DIP 1**	UP	Converter Mode
		DOWN	Switch Mode (default)
	DIP 2	UP	LFP enabled
		DOWN	LFP disabled (default)

LED indicator



Specifications

IEEE Standards	IEEE 802.3 10Base-T Ethernet IEEE 802.3u 100Base-TX Fast Ethernet IEEE 802.3u 100Base-FX Fast Ethernet IEEE802.3x Flow Control and Back Pressure
Data Processing	Store and Forward
Flow Control	IEEE 802.3x Flow Control and Back Pressure
Jumbo Frame	9KB
Architecture	Full wire speed conversion, Transparent conversion to 802.1Q VLAN tagged packets.
Network Connector	PC-MC-101-ECD-M 1 x RJ-45 10/100BaseT(X) 1 x 100M SC Multi-Mode 2km PC MC-101-ECD-S 1 x RJ-45 10/100BaseT(X) 1 x 100M SC Single-Mode 30km PC-MC-101-E 1 x RJ-45 10/100BaseT(X) 1 x 100M SFP
LED	PWR(Green): ON—Power is detected LK/Act(Green): ON—Fiber is detected Flashing—Data is transmitting/receiving RJ-45 port Green: ON—TX link is detected Flashing—TX data is transmitting/receiving Amber: ON—100M speed is detected OFF—10M speed is detected
DIP Switch	DIP1: UP Converter Mode DOWN Switch Mode (Default) DIP2: UP—LFP enable DOWN—LFP disable (Default) LFP: Link Fault Pass Through
Power protection	Surge protection diodes on power input
Connector protection	ESD protection diodes on TX port
Reserve polarity protection	Present
Overload current protection	Present
Power Input	18V-36VAC, 12V-60VDC, DC Jack terminal cable supported (DC Barrel Connector)
Conformance to UL Standards	Use Isolated power supply to conform with UL 508 standard
Power Consumption	Full Load: 1.92Watts at 48VDC

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~75°C
Operating Humidity	5% to 95% (Non-condensing)
Storage Temperature	-40°C~85°C
Housing Design	IP40 Design, high graded Aluminum
Case Dimension (L X W X D)	59 x 36 x 50 mm (L x W x D)
Installation	DIN-Rail mounted, Panel Mounted

Certifications

Safety	IEC EN60950-1
EMC/EMS	CE, FCC, VCCI
EMI	FCC Part 15 Subpart B Class A
Vibration	EN 60068-2-6
Shock	EN 60068-2-27
Free Fall	EN 60068-2-32

Housing Dimension (mm)