Quick Start Guide

HEMC3GB-X/HEMC3GA-X Series
Ethernet Media Converter

The HEMC3GB-X/HEMC3GA-X series industrial media converters provide industrial grade media conversion between 10/100/1000BaseT(X) and 1000BaseFX (SC/ST connectors). With the strengthened EMC grade, the HEMC3GB-X/HEMC3GA-X media converters are designed for harsh industrial environments while complying with FCC, and CE standards. Two operating temperature ranges are supported: -10°C to 60°C and -40°C to 75°C. SC and ST fiber connection types are supported for either multi-mode or single-mode for different applications. Reverse polarity protection is supported.

A Package Checklist

The HEMC3GB-X/HEMC3GA-X series media converter package consists of following items:

√ The HEMC3GB-X/HEMC3GA-X Series Media Converter Unit
√ Quick Start Guide

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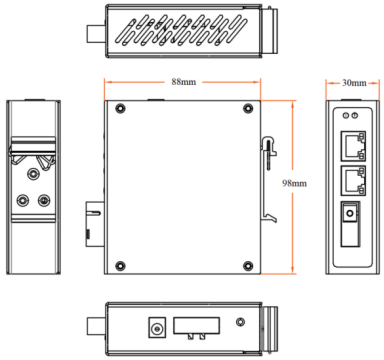
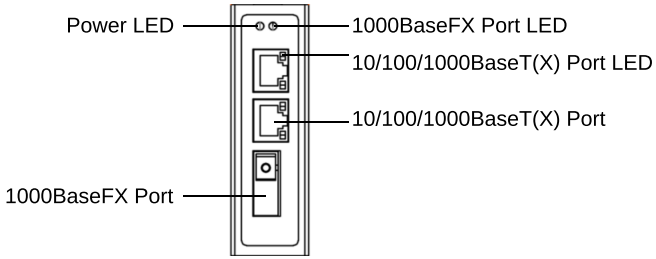
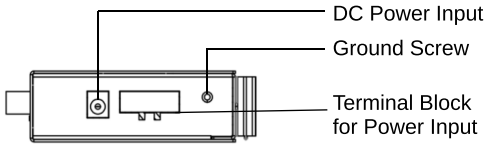
B Panel Layout



Front Panel



Side Panel



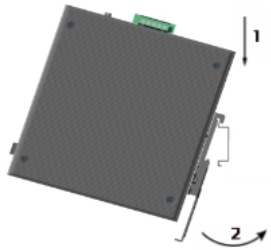
C LED Indicators

LED Indicators		State	Meaning	Color
PWR	Working Indicator	On	Power supply is normal.	Green
		Off	No normal power supply.	
		Flashing	System is working abnormally or faulty.	
PoE	Power over Ethernet	On	PoE power supply is normal.	Green
		Flashing	PD device is faulty or the power is excessive.	
		Off	No power over ethernet or PD device is not connected correctly.	
Link	Network Indicator	On	Port connection is normal.	Yellow
		Flashing	Data is being transmitted.	
		Off	There is no connection or the connection is down.	
L/A	Optical Fiber Indicator	On	Port connection is normal.	Green
		Flashing	Data is being transmitted.	
		Off	There is no connection or the connection is down.	
Speed or 1000M	Port Speed Indicator	On	Transmission speed is 1000Mbps.	Green
		Off	Transmission speed is not 1000Mbps.	

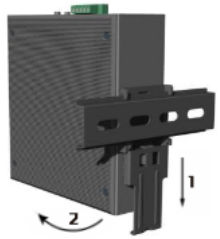
D Product Installation

Installation method of pull-type Din-rail:

1. Installing: first insert the hook part of the mounting ear into the upper rail of the guide rail, then pull the buckle downwards, and insert it into the lower rail of the guide rail to complete the installation.
2. Removing: first pull the buckle downwards, the lower snap-on of the mounting ear will be separated from the lower rail of the guide rail, and then pull it upwards to remove it.



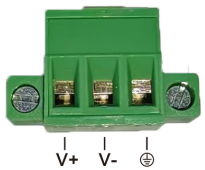
Installing



Removing

E Wiring the Power Input

How to wire the power input is shown as following diagram (Only for the schematicdiagram, not including all panels, the wiring is based on the positive and negative pole):
Note: Power the device using either the DC input or the Phoenix terminal. Do not connect both simultaneously.



Symbol	Definition	Illustration
V1	Input terminal of main power	1. When wiring, please be sure to check the positive and negative poles of the DC power cable. 2. Please ensure the unit is connected a power supply voltage that corresponds to the range of rating voltage. Never use a greater voltage power source.
V2	Input terminal of backup power	
PE	Ground connection terminal	Ground connection terminal for power protection

Warning

1. Turn the power off before you remove any wires. Read the side label of the product for power related instruction.
2. Please ensure the unit is connected a power supply voltage that corresponds to the range of rating voltage. Never use a greater voltage power source.
3. This is a Class A product, and running this device in a residential environment may cause wireless interference. In this case, the user may need to take practical action against the interference.
4. Grounding and wire routing help limit the effects of noise due to electromagnetic interference (EMI). Run the ground connection from the ground screw to the grounding surface prior to connecting devices.

G Installation Precautions

To avoid equipment damage and personal injury caused by improper use, please observe the following precautions:

 In order to avoid damage caused by equipment falling, please place the equipment in a stable environment.

 When supplying power to the equipment, pay attention to confirm the range of power supply voltage, as well as the positive and negative terminals of the power supply, in order to avoid damage to the equipment by wrong operation.

 To reduce the risk of electric shock, ensure that the equipment is well grounded in the working environment.

H Specifications

Protocol

Standards	IEEE802.3, IEEE802.3i, IEEE802.3u, IEEE802.3ab, IEEE802.3z, IEEE802.3x

Interface

Optical Fiber Port	Number of Port: 1 Port Type: Fixed Optical Port (SC/ST Port) Interface Rate: 1000Base-FX
Electrical Port	Number of Port: 2 Port Type: RJ45 Copper Port Port Speed: 10/100/1000M Adaptive Copper Port
Power Connector	DC Socket or Phoenix Terminal

Optical Fiber

Mode	Multi-mode	Single-mode
Center Wavelength	850nm	1310nm
TX Power	-5 ~ -9dBm	-3 ~ -9dBm
RX Power	⩾-17dBm	⩾-22dBm

Transportation Distance

Copper Port	100m
Optical Fiber	Multi-mode Optical Fiber: 550m Single-mode Optical Fiber: 20km

Power

Input Voltage	12 ~ 48 VDC
Power Consumption	Standby < 4W, Full load < 6W
Reverse Connection Protection	Supported
Matched Power Supply Cable and Plug	Purchased Separately

Working Environment

Working Temperature	HEMC3GB-X Series: -10°C to 60°C HEMC3GA-X Series: -40°C to 75°C
Storage Temperature	-40°C to 85°C
Relative Humidity	5% to 90% (No Condensation)

Mechanism

Housing	Metal Enclosure
Ingress Protection	IP30
Installation	DIN Rail Mounting
Size (W × H × D)	1.2" × 3.9" × 3.5" (30mm ×98mm × 88mm)

Standards and Certifications

EMI	FCC Part15, CISPR (EN55022) Class A
EMS	Lightning Protection: 6KV 8/20us IEC61000-4-2 (ESD) Level 3, IEC61000-4-3 (RS)Level 3, IEC61000-4-4 (EFT)Level 3, IEC61000-4-5 (Surge) Level 3, IEC61000-4-6 (Radio Frequency Transmission) Level 3, IEC61000-4-8 (Power Frequency Magnetic Field) Level 3, IEC61000-4-9 (Pulsed Magnet Field) Level 3,IEC61000-4-10 (Damped Oscillation) Level 3,IEC61000-4-12/18 (Shockwave)Level 3,EC61000-4-16 (Common-modeTransmission) Level 3, IEC61000-6-2 (Common Industrial Standard)
Shock	IEC 60068-2-27
Freefall	IEC 60068-2-32
Vibration	IEC 60068-2-6

Warranty

Warranty	5 Years