



2+2 PoE+ Multi-Functional Industrial Ethernet Media Converter

EMC-22GP-1

Flexible & Reliable Industrial PoE+ Connectivity

RLH Industries EMC-22GP is an industrial Gigabit Ethernet PoE+ media converter with three selectable operating modes: Redundant Fiber Backup Mode, Media Converter Mode, and Unmanaged Switch Mode. These operating modes provide flexible network topology solutions for a variety of field applications while reducing system complexity and deployment costs.

Multiple Functions

Redundant Fiber Backup Mode

Provides automatic link protection for highly critical networks.

Media Converter Mode

Supports fault link pass-through for improved network fault detection.

Unmanaged Switch Mode

Operates as a 4-port unmanaged switch for simplified daisy-chain network expansion.

The dual-rate 100/1000 SFP port supports multimode, singlemode, and bi-directional WDM fiber depending on the installed SFP. The EMC-22GP operates on 12~57VDC and supports dual redundant DC power inputs with surge protection for uninterrupted operation when connected to separate power sources.

Designed for industrial applications, the EMC-22GP is DIN rail mountable and hardened to operate in -40°C~+75°C, ensuring reliable performance in extreme environments.



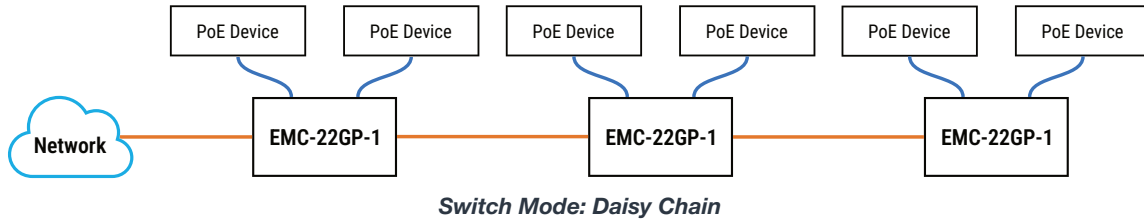
2+2 PoE+ Media Converter

Key Features

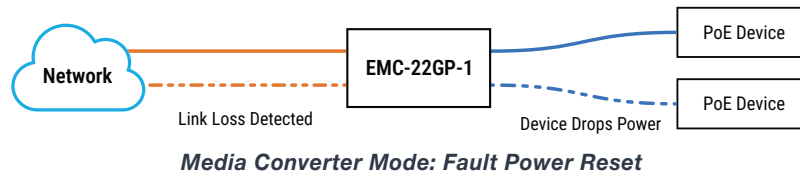
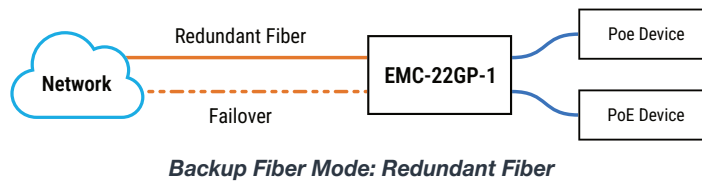
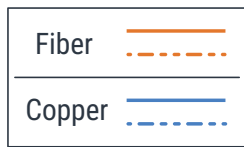
- 2 Gigabit RJ-45 & 2 dual-rate 100/1000Base-X SFP ports
- IEEE 802.3af/at PoE+ with 90W PoE budget
- Constant 48VDC PoE+ via integrated booster
- Supports Switch, Fiber Backup & Media Converter modes
- Relay output for power and port link faults
- LEDs for Power, Mode/Function, SFP, PoE & Activity
- Hardened to operate in -40°C~+75°C (-40°F~+167°F)
- Supports 9K Jumbo Frames
- Dual Redundant DC power inputs (12~57VDC)
- PoE control settings: Auto / Force Power
- DIN rail and wall-mountable
- IP30 aluminum housing



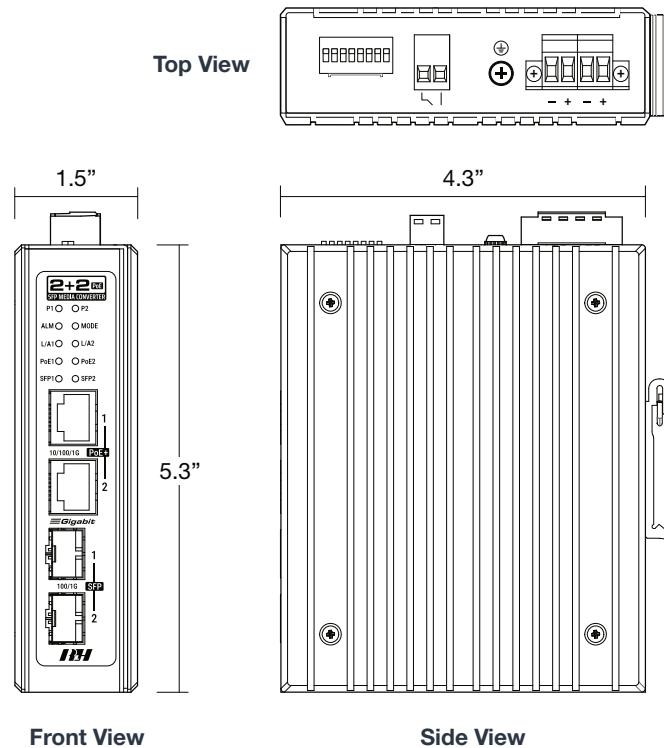
Application Diagrams



Network Cable Types



Dimensions





General Specifications

Physical Ports	2x 10/100/1000Base-T Ports RJ-45, 2x 100/1000Base-X Ports SFP			
Standards	IEEE 802.3 10Base-T (Ethernet), IEEE 802.3u 100Base-TX/FX (Fast Ethernet), IEEE 802.3ab 1000Base-T (Gigabit Ethernet), IEEE 802.3z 1000Base-X (Gigabit Ethernet), IEEE 802.3af Power over Ethernet (PoE), IEEE 802.3at Power over Ethernet Plus (PoE+)			
Ethernet Interface	Supports Jumbo Frames (9k Bytes), Auto MDI/MDI-X, Auto-Negotiation (Copper and Fiber Port)			
Features	Store and Forward, Fault Alarm Notification (Power, Ports), Auto & Force Mode Configuration, Full/Half Duplex Mode, Memory Buffer: 128K Bytes, Relay Output, MAC Address: 2k table size, Surge Protection: 6kV (K.21)			
LED Indicators	Power: P1, P2			
	Alarm Status: ALM			
	Operating Mode: Mode			
	RJ-45 Ports: LA1, LA2			
	PoE+ Status: PoE+ 1, PoE+ 2			
DIP Switch Function	DIP Switch	Function	OFF (Default)	ON
	1	External Port Link	Disable	Enable
	2	PoE Trigger	Disable	Enable
	3	Fiber Speed	1000Mbps	100Mbps
	4	Fiber Mode	Auto Negotiation Mode	Force Mode
	5	Operation Mode	Switch Mode	Converter Mode
	6	Converter Mode	Dual Mode	Redundant Fiber Mode
	7	TP Port 1 PoE Configure	Auto Mode	Force Mode
	8	TP Port 2 PoE Configure	Auto Mode	Force Mode
Power	Redundant Input Power: Dual DC inputs. 12~57VDC on 4-pin terminal blocks			
	Power Consumption: 96W (Max.)			
	Caution: Use 14AWG or better powering wire			
PoE	RJ-45 Port 1 at 802.3af/at (60W), RJ-45 Port 2 at 802.3af/at (30W)			
	Note: Only Port 1 is capable of 60W output. Both Ports 1 and 2 are capable of PoE+ (30W) simultaneously.			
Physical	Dimensions: 1.4"(W) x 4.3"(D) x 5.3"(H) (36x110x135mm)			
	Weight: 0.64kg (22.58oz)			
	Housing: Aluminum, IP30			
Temperature	Operating: -40°C~+75°C (-40°F~+167°F)		Storage: -40°C~+85°C (-40°F~+185°F)	
Humidity	5% to 90% non-condensing			
Stability	IEC60068-2-27 (Shock), IEC60068-2-31 (Free Fall), IEC60068-2-6 (Vibration)			
Compliance	FCC Class A, CE, RoHS, ITU-T K.21			

Ordering Information

Description	Part Number
2+2 Flex PoE+ 10/100/1G Industrial Ethernet Media Converter, SFP (100/1G) 12~57VDC	EMC-22GP-1

- Contact your RLH Sales Representative for more information

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