



2+2 Multi-Functional Industrial Ethernet Media Converter

EMC-22G-1

Rugged, Flexible & Reliable Fiber Connectivity

RLH Industries EMC-22G-1 is an industrial Gigabit Ethernet media converter featuring three operating modes: Unmanaged Switch Mode, Redundant Fiber Backup Mode, and Dual Media Converter Mode. The multiple operating modes provide reliable network topology solutions for a variety of field applications, reducing system complexity and deployment costs.

Multiple Functions

Unmanaged Switch Mode

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

Redundant Fiber Backup Mode

Provides automatic link protection for highly critical networks.

Dual Media Converter Mode

Supports two completely independent links for traffic separation.

The dual-rate 100/1000 SFP ports support multimode, singlemode, and bi-directional WDM fiber depending on the SFP used. The EMC-22G-1 operates on 12~48VDC and supports dual redundant power inputs with surge protection for uninterrupted operation. A built-in alarm relay provides power and link fault notification.

Designed for industrial applications, the EMC-22G-1 is DIN rail or wall mountable and hardened to operate in -40°C~+75°C, ensuring reliable performance in extreme environments.



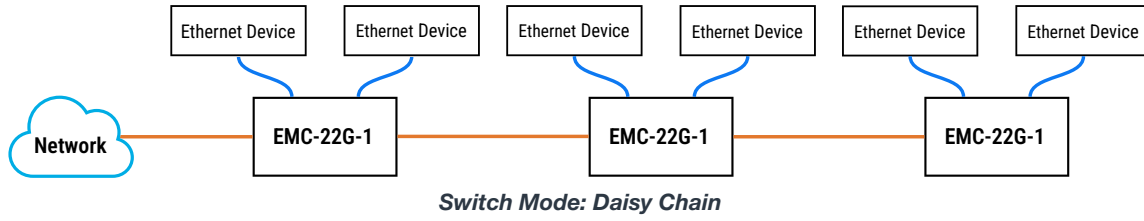
2+2 Media Converter

Key Features

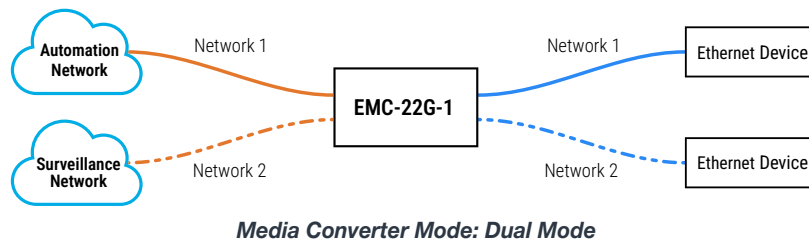
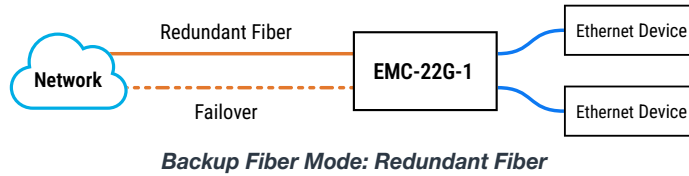
- 2 Gigabit RJ-45 & 2 dual-rate 100/1000Base-X SFP ports
- Supports Fiber Backup Mode, Dual Mode & Switch Mode
- Hardened to operate in -40°C~+75°C (-40°F~+167°F)
- Relay output for power and port link fault alarms
- LED indicators for Power, Mode/Function, SFP & Activity
- Supports 9k Jumbo Frames
- Dual DC power inputs (12~48VDC)
- DIN rail and wall-mountable
- IP-30 Aluminum Housing



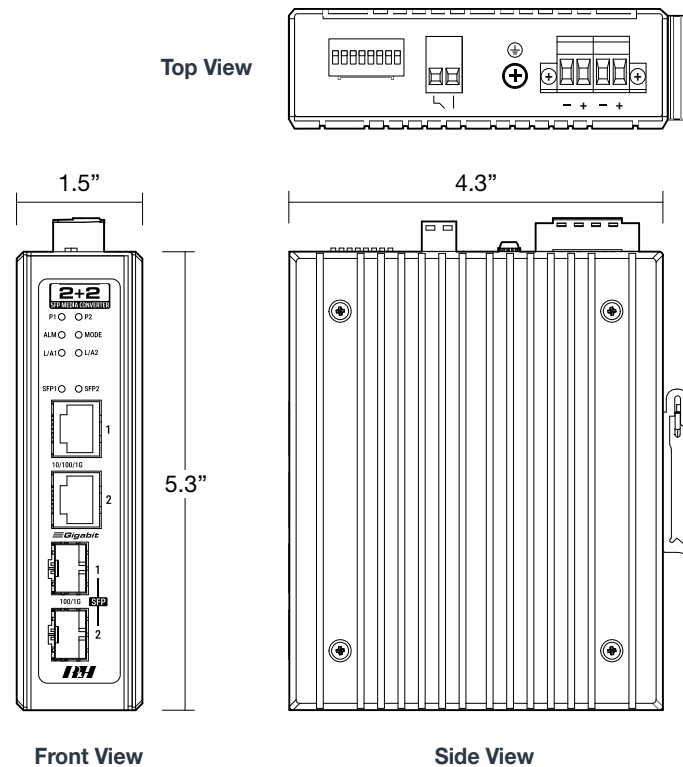
Application Diagrams



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)			
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) Power: P1, P2 Alarm Status: ALM			
LED Indicators	Operating Mode: Mode RJ-45 Ports: LA1, LA2 SFP Ports: SFP1, SFP2			
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	N/A	Always Keep Off	
8	N/A	Always Keep Off		
Power	Redundant Input Power: Dual DC inputs. 12~48VDC on 4-pin terminal blocks Power Consumption: 4.8W (Max.)			
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 10/100/1G Industrial Ethernet Media Converter, SFP (100/1G) 12~48VDC	EMC-22G-1

- Contact your RLH Sales Representative for more information

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