RLH Industries, Inc.

fiber<mark>optic</mark>link.com

PRODUCT DATA SHEET

ETH-82GP-48-1

DS-088 2025-0530

8+2 Gigabit SFP PoE+ Switch

Industrial Rugged and Compact

RLH industrial switches are engineered to provide reliable network performance in harsh environments. The 8+2 Gigabit SFP PoE+ switch provides both copper and fiber Gigabit Ethernet access, along with PoE+ powering capabilities. It is environmentally hardened to operate in a wide temperature range, which is the standard for RLH equipment.

The PoE+ ports provide up to 30 Watts of power to end devices following the IEEE 802.3af/at standard. The SFP ports are dual rate, they can support both Fast Ethernet or Gigabit SFP Modules allowing for extra flexibility when implementing in the field.

Our industrial switches robust features and construction meet the demands of a variety of applications, and are an ideal solution for a wide range of utility and automation environments.

Features

- Wide operating temperature range of -40°C to +75°C (-40°F to +167°F)
- 2 Dual Rate SFP Ports 100Mbps & 1Gbps
- 8 PoE+ ports with up to 30 Watts per port
- Up to 240 Watts of PoE output power
- Redundant power inputs
- Integrated alarm relay
- IEEE 802.3af/at Power over Ethernet
- Rugged case rated to IP30
- DIN rail & wall mountable
- UL Listed





8+2 Managed Gigabit SFP Switch

Dimensions





Specifications

Data Process:Size A Forward, CSMACD, IEEE 802.34 Hours resource Index oper Section (Section Section S	Switch Characteristics			
Standards:IEEE 002.301 100BasAT Fast EthernetIEEE 002.3a1 Power over Ethernet (PGE) IEEE 002.3a1 Power over Ethernet (PGE)Back-Plane Speed:20Gbpstransfer Rates:14.8800pps - Ethernet port 1.488.000pps - Gligabit Ethernet port 1.488.000pps - Gligabit Ethernet portTransfer Rates:Up to 100 Meters over twisted pairTransmission Distance:Up to 1000MpsMAC Address:8kable sizeEthernet Interface:Akable size(B) FJ-45 - 10/100/1000 Mbps with PGE+ (2) SFP Ports - Accepts 100 or 1000 speed SFP ModulesPoemer:00 Watts (Mode A / End Span)Poemer:00 Watts (Mode A / End Span)Poemer:00 Watts (Mode A / End Span)Poemer:Poetive (VCC) - RJ-45 Pins 1, 2Poetive (VCC) - RJ-45 Pins 3, 6Poetive (VCC) - RJ-45 Pins 3, 6Poer 10(1), Power 2(P2), Fault, Master, RingPower Portection:Power Portection:Power Portection:Power Rower Advertion, Poer Accepts 10 or 100 speed SFP ModulesPower Portection:Power Orons Mission (2) SFP Orons - Accepts 10.0 r 1000 speed SFP ModulesPower Orons Mission (2) SFP Orons - Accepts 10.0 r 1000 speed SFP ModulesPower Orons Mission (2) SFP Orons - Accepts 10.0 r 1000 speed SFP ModulesPower Orons Mission (2) SFP Orons - Accepts 10.0 r 1000 speed SFP ModulesPower Orons Mission (2) SFP Orons - Accepts 10.0 r 1000 speed SFP ModulesPower Orons Mission (2) SFP Orons - Accepts 10.0 r 1000 speed SFP ModulesPower Orons Mission (2) SFP Orons - Accepts 10.0 r 1000 speed SFP ModulesPower Orons Mission (2) SFP Orons - Ac	Data Process:	Store & Forward, CSMA/CD, IEEE 802.3x flow control, back pressure flow control		
Transfer Rates:14,880pps - Ethernet port 1,488,000pps - Gigabit Ethernet port 1,488,000pps - Gigabit Ethernet portTransmission Distance:Up to 1000 Meters over twisted pairTransmission Speed:Up to 1000 MbpsMAC Address:8k table sizeEthernet Interface:Auto MDI/MDI-X, Auto Speed & Duplex NegotiationPtemer Ports:(8) RJ-45 - 10/100/1000 Mbps with PoE+ (2) SFP Ports - Accepts 100 or 1000 speed SFP ModulesPoE Power:30 Watts (Mode A / End Span)PoE Pin Assignment:Positive (VCC+) - RJ-45 Pins 1, 2 Negative (VCC+) - RJ-45 Pins 3, 6Ptemer Ports:Power 1(P1), Power 2(P2), Fault, Master, Ring Ethernet Ports (Link and Activity), PoE+ (On and Off)Power Input:9x9ttro (Link and Activity), PoE+ (On and Off)Power Input:System 12W (All ports Active), PoE Output 30W Max per PoE port, 240W PoE Max BudgetPower Input:40°F to 185°F (-40°C to 75°C)Portang Temperature:40°F to 185°F (-40°C to 85°C)Operating Humidity:5% to 95% (Non-Condensing)Power Consumptio5% to 95% (Non-Condensing)	Standards:	IEEE 802.3u 100BaseTX Fast Ethernet IEEE 802.3af Power over Ethernet (PoE)		
Transfer Rates:14.8000pps - Gigabit Ethermet port 1480,000pps - Gigabit Ethermet portTransmission Distance:Up to 100 Meters over twisted pairTransmission Speed:Up to 1000MbpsMAC Address:8k table sizeEthernet Interface:Auto MDI/MDI-X, Auto Speed & Duplex NegotiationEthernet Interface:09.8J-45 - 10/100/1000 Mbps with PoE+ (2) SFP Ports - Accepts 100 or 1000 speed SFP ModulesPoE Power:03.0 Watts (Mode A / End Span)PoE Pin Assignment:Positive (VCC+) - RJ-45 Pins 1, 2 Negative (VCC-) - RJ-45 Pins 3, 6Power Interface:Power 10P1, Power 2(P2), Fault, Master, Ring Tenere Ports:Power Protection:Over Current, Power Apoleri JP PotectionPower Protection:System 12W (All ports Active), PoE - Upting JB (JB (JB (JE	Back-Plane Speed:	20Gbps		
Transmission Speed: Up to 1000Mbps MAC Address: 8k table size Ethernet Interface: Auto MDI/MDI-X, Auto Speed & Duplex Negotiation Ethernet Ports: (8) RJ-45 - 10/100/1000 Mbps with PoE+ (2) SFP Ports - Accepts 100 or 1000 speed SFP Modules 30 Watts (Mode A / End Span) PoE Power: 30 Watts (Mode A / End Span) PoE Pin Assignment: Positive (VCC+) - RJ-45 Pins 1, 2 Negative (VCC-) - RJ-45 Pins 3, 6 Negative (VCC-) - RJ-45 Pins 3, 6 Power 10P1, Power 2 (P2), Fault, Master, Ring Negative (VCC-) - RJ-45 Pins 4, Gen and Off) Power Protection: Over Current, Power Reversal, Polarity Protection Power Input: 48-55VDC redundant power inputs (pluggable terminal block) Max Power Consumtio System 12W (All ports Active), PoE Qutput 30W Max per PoE port, 240W PoE Max Budget Faith Output: 1 Relay output rated for 24VDC @ 1 Amp Operating Temperature: 40°F to 185°F (40°C to 85°C) Storage Temperature: 40°F to 185°F (40°C to 85°C) Operating Humidity: 5% to 95% (Non-Condensing)	Transfer Rates:	148,800pps - Fast Ethernet port,		
MAC Address:8k table sizeEthernet Interface:Auto MDI/MDI-X, Auto Speed & Duplex NegotiationEthernet Ports:(8) RJ-45 - 10/100/1000 Mbps with PoE+Ethernet Ports:(8) RJ-45 - 10/100/1000 Mbps with PoE+PotForm:(9) RJ-45 - 10/100/1000 Mbps with PoE+PotForm:(9) RJ-45 - 10/100/1000 Mbps with PoE+PotForm:(9) RJ-45 - 10/100/1000 Mbps with PoE+PotForm:Postive (VCC+) - RJ-45 Pins 1, 2PotFive (VCC+) - RJ-45 Pins 3, 6PotForm:Power 1 (P1), Power 2 (P2), Fault, Master, RingPower Potection:Over Current, Power 2 (P2), Fault, Master, RingPower Protection:Over Current, Power Reversal, Polarity ProtectionPower Input:style (MCC - reduct power Reversal, Polarity ProtectionPower Input:style (MI ports Active), PoE - (0n and Off)Fault Output:style (MI ports Active), PoE Output 30W Max per PoE port, 240W PoE Max BudgetFault Output:style (MI ports Active), PoE Output 30W Max per PoE port, 240W PoE Max BudgetFormage Temperature:style (MI ports Cto 75°C)Storage Temperature:style (MI ports Cto 75°C)Operating Humidity:Sto 95% (Non-Condensing)Operating Temperature:style (MI ports Active) PoE port, 240W PoE Max BudgetOperating Humidity:style (MI ports Active) PoE port, 240W PoE Max BudgetOperating Humidity:style (MI ports Cto 75°C)Operating Humidity:style (MI ports Cto 75°C)Operating Humidity:style (MI ports Cto 85°C)Operating Humidity:style (MI ports Cto 85°C)Operating Humid	Transmission Distance:	Up to 100 Meters over twisted pair		
Ethernet Interface: Auto MDI/MDI-X, Auto Speed & Duplex Negotiation Ethernet Ports: (8) RJ-45 - 10/100/1000 Mbps with PoE+ (2) SFP Ports - Accepts 100 or 1000 speed SFP Modules PoE Power: 30 Watts (Mode A / End Span) PoE Pin Assignment: Positive (VCC+) - RJ-45 Pins 1, 2 Negative (VCC-) - RJ-45 Pins 3, 6 Negative (VCC-) - RJ-45 Pins 3, 6 Power 1 (P1), Power 2 (P2), Fault, Master, Ring Power 1 (P1), Power 2 (P2), Fault, Master, Ring Power Protection: Over Current, Power Reversal, Polarity Protection Power Input: 48-55VDC redundant power inputs (pluggable terminal block) Max Power Consumptio: System 12W (All ports Active), POE Output 30W Max per POE port, 240W POE Max Budget Fault Output: 1 Relay output rated for 24VDC @ 1 Amp Operating Temperature: 40°F to 185°F (-40°C to 85°C) Storage Temperature: 5% to 95% (Non-Condensing) Operating Humidity: 5% to 95% (Non-Condensing)	Transmission Speed:	Up to 1000Mbps		
Bethernet Ports: (a) RJ-45 - 10/100/1000 Mbps with PoE+ (b) RJ-45 - 10/100/1000 Mbps with PoE+ (c) SFP Ports - Accepts 100 or 1000 speed SFP Modules PoE 30 Watts (Mode A / End Span) PoE Pin Assignment: Positive (VCC+) - RJ-45 Pins 1, 2 Negative (VCC-) - RJ-45 Pins 3, 6 Negative (VCC-) - RJ-45 Pins 3, 6 Poet Protection: Power 1 (P1), Power 2 (P2), Fault, Master, Ring Power Protection: Over Current, Power Reversal, Polarity Protection Power Input: 48-55VDC redundant power inputs (pluggable terminal block) Max Power Consumption System 12W (All ports Active), POE U dyu Max per PoE port, 240W PoE Max Budget Fault Output: 1 Relay output rated for 24VDC @ 1 Amp Gorgating Temperature: 40°F to 165°F (-40°C to 75°C) Grange Temperature: 500 Sign (Non-Condensing) Operating Humidity: Sign Sign (Non-Condensing)	MAC Address:	8k table size		
Ethernet Ports: i SFP Ports - Accepts 100 or 1000 speed SFP Modules PoE Power: 30 Watts (Mode A / End Span) PoE Pin Assignment: Positive (VCC+) - RJ-45 Pins 1, 2 Pogetive (VCC-) - RJ-45 Pins 3, 6 Negative (VCC-) - RJ-45 Pins 3, 6 Power 2 (P2), Fault, Master, Ring Power 1 (P1), Power 2 (P2), Fault, Master, Ring Power Protection: Over Current, Power Reversal, Polarity Protection Power Input: 48-55VDC redundant power inputs (pluggable terminal block) Max Power Consumption System 12W (All ports Active), PoE - Unty 30W Max per PoE port, 240W PoE Max Budget Fault Output: 1 Relay output rated for 24VDC @ 1 Amp Operating Temperature: -40°F to 185°F (-40°C to 75°C) Operating Humidity: 5% to 95% (Non-Condensing) Operating Humidity: Sive 05% (Non-Condensing)	Ethernet Interface:	Auto MDI/MDI-X, Auto Speed & Duplex Negotiation		
Initiation of the service of the se	Eth ann at Dani	(8) RJ-45 - 10/100/1000 Mbps with PoE+		
PoE Pin Assignment: Positive (VCC+) – RJ-45 Pins 1, 2 Regative (VCC-) – RJ-45 Pins 3, 6 LED Status Indicators: Power 1 (P1), Power 2 (P2), Fault, Master, Ring Ethernet Ports (Link and Activity), PoE+ (On and Off) Power Protection: Over Current, Power Reversal, Polarity Protection Power Input: 48-55VDC redundant power inputs (pluggable terminal block) Max Power Consumption System 12W (All ports Active), PoE Output 30W Max per PoE port, 240W PoE Max Budget Fault Output: 1 Relay output rated for 24VDC @ 1 Amp Operating Temperature: -40°F to 185°F (-40°C to 85°C) Operating Humidity: 5% to 95% (Non-Condensing) Operating Humidity: 5% to 95% (Non-Condensing)	Ethemet Ports.	(2) SFP Ports – Accepts 100 or 1000 speed SFP Modules		
PoE Pin Assignment: Instantion Regative (VCC-) – RJ-45 Pins 3, 6 LED Status Indicators: Power 1 (P1), Power 2 (P2), Fault, Master, Ring Ethernet Ports (Link and Activity), PoE+ (On and Off) Power Protection: Over Current, Power Reversal, Polarity Protection Power Input: 48-55VDC redundant power inputs (pluggable terminal block) Max Power Consumptio: System 12W (All ports Active), PoE Output 30W Max per PoE port, 240W PoE Max Budget Fault Output: 1 Relay output rated for 24VDC @ 1 Amp Operating Temperature: -40°F to 167°F (-40°C to 75°C) Storage Temperature: 5% to 95% (Non-Condensing) Operating Humidity: 5% to 95% (Non-Condensing)	PoE Power:	30 Watts (Mode A / End Span)		
Negative (VCC-) – RJ-45 Pins 3, 6 LED Status Indicators: Power 1 (P1), Power 2 (P2), Fault, Master, Ring Ethernet Ports (Link and Activity), PoE+ (On and Off) Power Protection: Over Current, Power Reversal, Polarity Protection Power Input: 48~55VDC redundant power inputs (pluggable terminal block) Max Power Consumption System 12W (All ports Active), PoE Output 30W Max per PoE port, 240W PoE Max Budget Fault Output: 1 Relay output rated for 24VDC @ 1 Amp Operating Temperature: 40°F to 167°F (-40°C to 75°C) Storage Temperature: 5% to 95% (Non-Condensing) Operating Humidity: 5% to 95% (Non-Condensing)	PoE Pin Assignment:	Positive (VCC+) – RJ-45 Pins 1, 2		
LED Status Indicators: Ethernet Ports (Link and Activity), PoE+ (On and Off) Power Protection: Over Current, Power Reversal, Polarity Protection Power Input: 48~55VDC redundant power inputs (pluggable terminal block) Max Power Consumption: System 12W (All ports Active), PoE Output 30W Max per PoE port, 240W PoE Max Budget Fault Output: 1 Relay output rated for 24VDC @ 1 Amp Operating Temperature: -40°F to 167°F (-40°C to 75°C) Storage Temperature: 5% to 95% (Non-Condensing) Operating Humidity: 5% to 95% (Non-Condensing)		Negative (VCC-) – RJ-45 Pins 3, 6		
Ethernet Ports (Link and Activity), PoE+ (On and Off)Power Protection:Over Current, Power Reversal, Polarity ProtectionPower Input:48~55VDC redundant power inputs (pluggable terminal block)Max Power ConsumptionSystem 12W (All ports Active), PoE Output 30W Max per PoE port, 240W PoE Max BudgetFault Output:1 Relay output rated for 24VDC @ 1 AmpOperating Temperature:-40°F to 167°F (-40°C to 75°C)Storage Temperature:-40°F to 185°F (-40°C to 85°C)Operating Humidity:5% to 95% (Non-Condensing)Construction:Powder coated IP30 steel housing		Power 1 (P1), Power 2 (P2), Fault, Master, Ring		
Power Input:48~55VDC redundant power inputs (pluggable terminal block)Max Power Consumption:System 12W (All ports Active), PoE Output 30W Max per PoE port, 240W PoE Max BudgetFault Output:1 Relay output rated for 24VDC @ 1 AmpOperating Temperature:-40°F to 167°F (-40°C to 75°C)Storage Temperature:-40°F to 185°F (-40°C to 85°C)Operating Humidity:5% to 95% (Non-Condensing)Construction:Powder coated IP30 steel housing	LED Status indicators.	Ethernet Ports (Link and Activity), PoE+ (On and Off)		
Max Power Consumption:System 12W (All ports Active), PoE Output 30W Max per PoE port, 240W PoE Max BudgetFault Output:1 Relay output rated for 24VDC @ 1 AmpOperating Temperature:-40°F to 167°F (-40°C to 75°C)Storage Temperature:-40°F to 185°F (-40°C to 85°C)Operating Humidity:5% to 95% (Non-Condensing)Construction:Powder coated IP30 steel housing	Power Protection:	Over Current, Power Reversal, Polarity Protection		
Fault Output:1 Relay output rated for 24VDC @ 1 AmpOperating Temperature:-40°F to 167°F (-40°C to 75°C)Storage Temperature:-40°F to 185°F (-40°C to 85°C)Operating Humidity:5% to 95% (Non-Condensing)Construction:Powder coated IP30 steel housing	Power Input:	48~55VDC redundant power inputs (pluggable terminal block)		
Operating Temperature:-40°F to 167°F (-40°C to 75°C)Storage Temperature:-40°F to 185°F (-40°C to 85°C)Operating Humidity:5% to 95% (Non-Condensing)Construction:Powder coated IP30 steel housing	Max Power Consumption:	System 12W (All ports Active), PoE Output 30W Max per PoE port, 240W PoE Max Budget		
Storage Temperature: -40°F to 185°F (-40°C to 85°C) Operating Humidity: 5% to 95% (Non-Condensing) Construction: Powder coated IP30 steel housing	Fault Output:	1 Relay output rated for 24VDC @ 1 Amp		
Operating Humidity: 5% to 95% (Non-Condensing) Construction: Powder coated IP30 steel housing	Operating Temperature:	-40°F to 167°F (-40°C to 75°C)		
Construction: Powder coated IP30 steel housing	Storage Temperature:	-40°F to 185°F (-40°C to 85°C)		
	Operating Humidity:	5% to 95% (Non-Condensing)		
Case Dimensions: 1.81" (W) x 3.90" (D) x 5.59" (H), (46mm x 99mm x 142mm) *Not including connectors or DIN bracket	Construction:	Powder coated IP30 steel housing		
	Case Dimensions:	1.81" (W) x 3.90" (D) x 5.59" (H), (46mm x 99mm x 142mm) *Not including connectors or DIN bracket		



Specifications (cont.)

Switch Characteristics			
Installation:	Standard DIN rail (TS-35) or wall mount *Wall mount brackets included		
EMI:	FCC Part 15 Subpart B Class A, CE EN55032, CE EN61000-4-2/3/4/5/6/8/11/12, CE EN61000-6-2, CE EN61000-6-4		
Stability Testing:	IEC60068-2-32 (Free fall), IEC60068-2-27 (Shock), IEC60068-2-6 (Vibration)		
Safety:	CE, FCC Class A, UL 61010-1 3rd Edition and UL 61010-2-201 1st Edition, File Number: E480850, UL Class 1/Div.2		
Compliance:	NDAA, TAA, NEMA TS2 (ITS), RoHS and REACH compliant		
MTBF:	613,584 hrs.	Telcordia SR-332, Issue 3, GB, 25°C	
Warranty:	5 Years	Visit www.fiberopticlink.com for warranty details	

Ordering Information

Description	Part Number
Managed Switch, 8 Gigabit RJ-45 Ports, 2 Dual Rate SFP Ports, Powering Voltage 12~48 DC	ETH-82GM-1

Contact

By Mail:	ATTN: Sales	
	RLH Industries, Inc. 936 N. Main Street Orange, CA 92867	
By Phone:	Local	714-532-1672
Sales/Service:	Toll Free	800-877-1672
By Email:	info@fiberopticlink.com	
By Fax:	714-532-1885	

Support

By Email:	support@fiberopticlink.com
By Phone:	Toll Free 855-754-2497