



**RLH Industries, Inc.**

fiber**o**pticlink.com

PRODUCT  
DATA SHEET

DS-088 2025-1006

## 8+2 Unmanaged 10/100/1G SFP PoE+ Industrial Switch

ETH-82GP-48-1

### High Port Count, PoE+ (802.3at 30 Watts), C1D2/NEMA TS2 (ITS) Design

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.

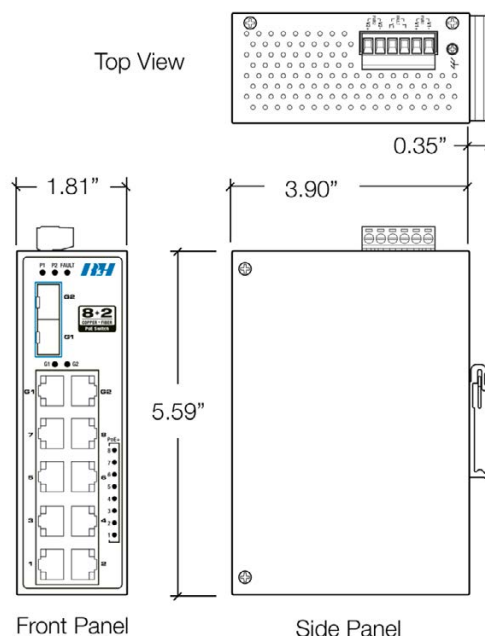


8+2 Unmanaged 10/100/1G SFP PoE+ DIN View

### Features

- Hardened to operate in -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

### Dimensions





## General Specifications

|                               |                                                                                                                                    |                                                                                                                                                     |
|-------------------------------|------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Data Process:</b>          | Store & Forward, CSMA/CD, IEEE 802.3x flow control, back pressure flow control                                                     |                                                                                                                                                     |
| <b>Standards:</b>             | <b>IEEE 802.3</b> 10BaseT Ethernet<br><b>IEEE 802.3u</b> 100BaseTX Fast Ethernet<br><b>IEEE 802.3ab</b> 1000BaseT Gigabit Ethernet | <b>IEEE 802.3z</b> 1000Base-X Gigabit Fiber<br><b>IEEE 802.3af</b> Power over Ethernet (PoE)<br><b>IEEE 802.3at</b> Power over Ethernet Plus (PoE+) |
| <b>Back-Plane Speed:</b>      | 20Gbps                                                                                                                             |                                                                                                                                                     |
| <b>Transfer Rates:</b>        | 14,880pps - Ethernet port<br>148,800pps - Fast Ethernet port,<br>1,488,000pps - Gigabit Ethernet port                              |                                                                                                                                                     |
| <b>Transmission Distance:</b> | Up to 100 Meters over twisted pair                                                                                                 |                                                                                                                                                     |
| <b>Transmission Speed:</b>    | Up to 1000Mbps                                                                                                                     |                                                                                                                                                     |
| <b>MAC Address:</b>           | 8k table size                                                                                                                      |                                                                                                                                                     |
| <b>Ethernet Interface:</b>    | Auto MDI/MDI-X, Auto Speed & Duplex Negotiation                                                                                    |                                                                                                                                                     |
| <b>Ethernet Ports:</b>        | (8) RJ-45 - 10/100/1000 Mbps with PoE+<br>(2) SFP Ports – Accepts 100 or 1000 speed SFP Modules                                    |                                                                                                                                                     |
| <b>PoE Power:</b>             | 30 Watts (Mode A / End Span)                                                                                                       |                                                                                                                                                     |
| <b>PoE Pin Assignment:</b>    | Positive (VCC+) – RJ-45 Pins 1, 2<br>Negative (VCC-) – RJ-45 Pins 3, 6                                                             |                                                                                                                                                     |
| <b>LED Status Indicators:</b> | Power 1 (P1), Power 2 (P2), Redundant Power Loss (Fault)<br>Ethernet Ports (Link and Activity), PoE+ (On and Off)                  |                                                                                                                                                     |
| <b>Power Protection:</b>      | Over Current, Power Reversal, Polarity Protection                                                                                  |                                                                                                                                                     |
| <b>Power Input:</b>           | 48~55VDC redundant power inputs (pluggable terminal block)                                                                         |                                                                                                                                                     |
| <b>Max Power Consumption:</b> | System 12W (All ports Active), PoE Output 30W Max per PoE port, 240W PoE Max Budget                                                |                                                                                                                                                     |
| <b>Fault Output:</b>          | 1 Relay output rated for 24VDC @ 1 Amp                                                                                             |                                                                                                                                                     |
| <b>Operating Temperature:</b> | -40°F to 167°F (-40°C to 75°C)                                                                                                     |                                                                                                                                                     |
| <b>Storage Temperature:</b>   | -40°F to 185°F (-40°C to 85°C)                                                                                                     |                                                                                                                                                     |
| <b>Operating Humidity:</b>    | 5% to 95% (Non-Condensing)                                                                                                         |                                                                                                                                                     |
| <b>Construction:</b>          | Powder coated IP30 steel housing                                                                                                   |                                                                                                                                                     |
| <b>Case Dimensions:</b>       | 1.81" (W) x 3.90" (D) x 5.59" (H), (46mm x 99mm x 142mm) *Not including connectors or DIN bracket                                  |                                                                                                                                                     |



## General Specifications (cont.)

|                      |                                                                                                                |
|----------------------|----------------------------------------------------------------------------------------------------------------|
| <b>Installation:</b> | Standard DIN rail (TS-35) or wall mount *Wall mount brackets included                                          |
| <b>EMI:</b>          | 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      |
| <b>Stability:</b>    | IEC60068-2-32 (Free fall), IEC60068-2-27 (Shock), IEC60068-2-6 (Vibration)                                     |
| <b>Safety:</b>       | CE, FCC Class A, UL 61010-1 3rd Edition and UL 61010-2-201 1st Edition, File Number: E480850, UL Class 1/Div.2 |
| <b>Compliance:</b>   | NDAA, TAA, NEMA TS2 (ITS), RoHS and REACH compliant                                                            |
| <b>MTBF:</b>         | 613,584 hrs. - Telcordia SR-332, Issue 3, GB, 25°C                                                             |
| <b>Warranty:</b>     | 5 Years - Visit <a href="http://www.fiber opticlink.com">www.fiber opticlink.com</a> for warranty details      |

## Ordering Information

| Description                                                                         | Part Number          |
|-------------------------------------------------------------------------------------|----------------------|
| 8+2 Unmanaged PoE+ 10/100/1G Industrial Ethernet Switch, SFP(100/1G) ports 48-55VDC | <b>ETH-82GP-48-1</b> |

## Contact

|                       |                                                                                   |              |
|-----------------------|-----------------------------------------------------------------------------------|--------------|
| <b>By Mail:</b>       | ATTN: Sales<br><br>RLH Industries, Inc.<br>936 N. Main Street<br>Orange, CA 92867 |              |
| <b>By Phone:</b>      | Local                                                                             | 714-532-1672 |
| <b>Sales/Service:</b> | Toll Free                                                                         | 800-877-1672 |
| <b>By Email:</b>      | <a href="mailto:info@fiber opticlink.com">info@fiber opticlink.com</a>            |              |
| <b>By Fax:</b>        | 714-532-1885                                                                      |              |

## Support

|                  |                                                                              |
|------------------|------------------------------------------------------------------------------|
| <b>By Email:</b> | <a href="mailto:support@fiber opticlink.com">support@fiber opticlink.com</a> |
| <b>By Phone:</b> | Toll Free 855-754-2497                                                       |