

# LNP-2004G-SFP Series

20-Port Industrial Gigabit PoE+ Unmanaged Ethernet Switch, with 16\*10/100/1000Tx (30W/Port) and 4\*100/1000 SFP Slots; 48~55VDC Power Input



## Features

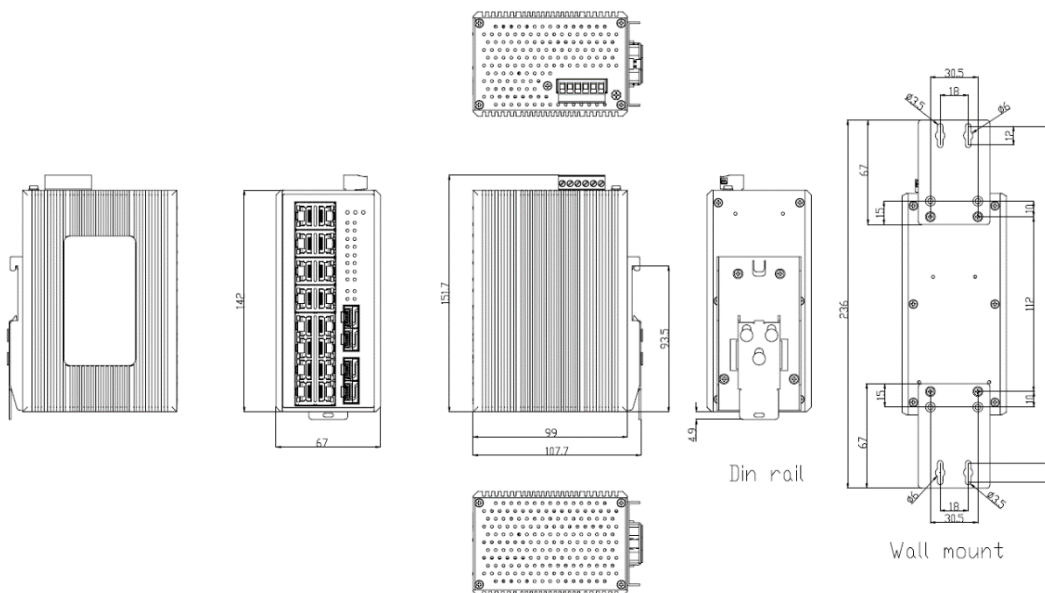
- ▶ Support 16\*10/100/1000Tx Gigabit Ethernet with IEEE 802.3at Compliant PoE+
- ▶ Support 4\*100/1000 Auto Sensing SFP Slots
- ▶ Built-in Relay for Power Redundancy Failure Warning
- ▶ RJ45 Port Support Auto MDI / MDI-X Function
- ▶ Auto Negotiation Speed, Half / Full Duplex
- ▶ Store-and-Forward Switching Architecture
- ▶ Redundant Power Input: 48~55VDC
- ▶ Power Polarity Reverse Protection
- ▶ Overload Current Protection
- ▶ DIN-Rail and Wall Mount Support
- ▶ Tested at Heavy Industry EMS Level for the Best Electro-Magnetic Susceptibility
- ▶ Operating Temperature Range: STD: -10° to 65°C, EOT: -40° to 75°C
- ▶ 5-Year Warranty

## INTRODUCTION

Antaira Technologies' LNP-2004G-SFP series industrial PoE+ gigabit unmanaged Ethernet switch features sixteen Gigabit ports with IEEE 802.3at high power PoE (30W/Port). The LNP-2004G-SFP series also provides four dual rate 100/1000Fx SFP slots for fiber connections, making it ideal for applications that demand PoE power support, high bandwidth and long-distance communication within any harsh or outdoor environment. This product series also provides high EFT and ESD protection to prevent any unregulated voltage. There are two wide operating temperature models to support either a -10° to 65°C or -40° to 75°C environment.

The LNP-2004G-SFP series is ideal for supporting applications that require high-density PoE+ port connections, such as, security surveillance, traffic monitoring systems, facility management in power/utility, water wastewater treatment plants, oil/gas/mining, and GigE machine vision systems within factory automation.

## DIMENSIONS



## SPECIFICATIONS

|                                   |   |
|-----------------------------------|---|
| <b>Technology</b>                 |   |
| <b>Standards</b>                  | IEEE 802.3 10Base-T Ethernet<br>IEEE 802.3u 100Base-TX Fast Ethernet<br>IEEE 802.3ab 1000BaseT<br>IEEE 802.3z 1000Base-X Gigabit Fiber<br>IEEE 802.3af/at Power over Ethernet   |
| <b>Processing Type</b>            | Store and Forward   |
| <b>Protocol</b>                   | CSMA/CD   |
| <b>Flow Control</b>               | IEEE 802.3x back pressure flow control  |
| <b>Switch Properties</b>          |   |
| <b>Switch Architecture</b>        | Back-Plane: Non-Blocking Switching Fabric   |
| <b>Transfer Rate</b>              | 14,880pps for Ethernet Port<br>148,800pps for Fast Ethernet Port<br>1,488,000pps for Gigabit Ethernet Port  |
| <b>Memory Buffer</b>              | 512Kbytes   |
| <b>Jumbo Frame</b>                | 9,216bytes  |
| <b>MAC Table Size</b>             | 8K  |
| <b>Interface</b>                  |   |
| <b>Ethernet Port</b>              | 16*10/100/1000T(X) with 16*PoE+, auto negotiation speed, Full/Half duplex mode, and auto MDI/MDI-X connection   |
| <b>PoE Pin Out</b>                | V+, V+, V-, V-, for pin 1, 2, 3, 6 (Endspan, MDI Alternative A)   |
| <b>Fiber Port</b>                 | 4*100/1000 SFP Slot   |
| <b>LED Indicators</b>             | Power 1, Power 2, Fault<br>Ethernet Ports: On- Link / Flashing- Data transmitting<br>PoE: On- connected to PD devices<br>SFP: Link / Active   |
| <b>Wavelength</b>                 | Depends on SFP modules  |
| <b>Network Cable</b>              | 10BaseT: 2-pair UTP/STP Cat. 3, 4, 5 cable<br>EIA/TIA-568 100-ohm (100m)<br>100BaseTX: 2-pair UTP/STP Cat. 5 cable<br>EIA/TIA-568 100-ohm (100m)<br>1000BaseTX: UTP/STP Cat.5/5E cable;<br>EIA/TIA-568 100-ohm (100m) |
| <b>Mechanical Characteristics</b> |   |
| <b>Housing</b>                    | Aluminum and Metal, IP30 protection   |
| <b>Dimensions</b>                 | 67 x 142 x 99 mm (W x H x D)  |
| <b>Weight</b>                     | Unit: 2.75 lbs.<br>Shipping: 3.31 lbs.  |
| <b>Mounting</b>                   | DIN-Rail, Wall Mounting (optional)  |

|                                    |   |
|------------------------------------|---|
| <b>Power Requirement</b>           |   |
| <b>Input Voltage</b>               | 48 to 55VDC, Redundant Inputs   |
| <b>Power Connection</b>            | 1 removable 6-contact terminal block  |
| <b>Reverse Polarity Protection</b> | Present   |
| <b>Overload Current Protection</b> | Present   |
| <b>PoE Power Output</b>            | 30Watts max. per PoE port   |
| <b>Power Consumption</b>           | 16Watts for System  |
| <b>Max. PoE Power Budget</b>       | 240Watts  |
| <b>Relay Contact</b>               | 24VDC, 1A resistive   |
| <b>Environmental Limits</b>        |   |
| <b>Operating Temperature</b>       | STD: -10°C to 65°C<br>EOT: -40°C to 75°C  |
| <b>Storage Temperature</b>         | -40°C to 85°C   |
| <b>Ambient Relative Humidity</b>   | 5% to 95%, (non-condensing)   |
| <b>Regulatory Approvals</b>        |   |
| <b>EMI</b>                         | FCC Part 15 Subpart B Class A,<br>CE EN 55032 Class A,<br>EN 61000-6-4 Class A  |
| <b>EMS</b>                         | CE EN 55024 Class A,<br>EN 61000-6-2 Class A,<br>IEC61000-4-2 (ESD),<br>IEC61000-4-3 (RS),<br>IEC61000-4-4 (EFT),<br>IEC61000-4-5 (Surge),<br>IEC61000-4-6 (CS),<br>IEC61000-4-8 (Magnetic Field) |
| <b>Free Fall Shock</b>             | IEC60068-2-32<br>IEC60068-2-27  |
| <b>Vibration</b>                   | IEC60068-2-6  |
| <b>Green</b>                       | RoHS Compliant  |
| <b>Certifications</b>              | FCC, CE, UL 61010-1 (Pending),<br>UL 61010-2-201 (Pending)  |
| <b>Warranty</b>                    | 5 Years   |

## ORDERING INFO

|                        |   |
|------------------------|---|
| <b>LNP-2004G-SFP</b>   | 20-Port Industrial Gigabit PoE+ Unmanaged Ethernet Switch, with 16*10/100/1000Tx (30W/Port) + 4*100/1000 SFP                        |
| <b>LNP-2004G-SFP-T</b> | 20-Port Industrial Gigabit PoE+ Unmanaged Ethernet Switch, with 16*10/100/1000Tx (30W/Port) + 4*100/1000 SFP;<br>EOT: -40°C to 75°C |

### Optional Accessories

|                   |  |
|-------------------|--|
| <b>NDR-240-48</b> | 240W Industrial DIN-Rail Power Supply, 48VDC |
| <b>NDR-480-48</b> | 480W Industrial DIN-Rail Power Supply, 48VDC |