

## IDS-108F Industrial Ethernet Switch

 [perle.com/products/8-port-industrial-ethernet-switch.shtml](https://www.perle.com/products/8-port-industrial-ethernet-switch.shtml)

### 8 to 10 port Compact DIN Rail Switch



- 8 port 10/100Base-TX ( RJ45 )
- 8 port 10/100Base-TX ( RJ45 ) plus 1 or 2 SC/ST fiber ports
- Hazardous Location and Industrial Control Equipment Certification
- Corrosion resistant IP30 aluminum case
- Redundant dual power input 12/24/48 VDC, 18 to 30 VAC
- Overload current and reverse polarity protection
- Industrial operating temperature support up to -40 to 75C

Perle **Industrial-grade Ethernet Switches** are designed to stand up to **extreme temperatures, surges, vibrations, and shocks** found in **industrial automation, government, military, oil and gas, mining and outdoor applications**.

The **IDS-108F is an 8 to 10 port Industrial Ethernet Switch** providing advanced performance to enable real-time deterministic network operation. It requires no configuration and will operate instantly as soon as you power it up.

The IDS-108F comes in a variety of models with 8 copper ports, 8 copper ports plus 1 fiber port or 8 copper ports plus 2 fiber ports. All are **rugged fan-less switches** that are hardened to provide superior reliability in **0 to 60°C**, or harsh extended operating temperatures from **-40 to 75°C**.

**Perle** has been **designing industrial hardware** for serial ModBus and Profinet to Ethernet conversion environments **for over 35 years** and have used this expertise to design the **toughest Ethernet switches on the market**. Don't trust your critical communications to commercial switch products. Perle Industrial Ethernet switches give you proven assurance that your system will keep running for years to come.

### IDS-108F Industrial Ethernet Switch Features

Rugged design for harsh environments

- Corrosion resistant IP30 aluminum case
- UL508A Industrial Control Equipment Safety certified
- Hazardous locations - Class 1/Div2, ATEX Class 1/Zone2

Reliable operation

- Fan-less, no moving parts
- Dual power input. Connect to separate power sources for redundancy.
  - Reverse polarity protection
  - Overload current protection
- Handles vibration and shock conditions found in industrial environments

Real-time Ethernet performance

- Fast wire-speed , store and forward switching, non-blocking architecture
- Auto-sensing for speed and duplex

- Auto-mdi/mdix-crossover works with straight and crossover cables

### Power

|                                     |   |
|-------------------------------------|---|
| Dual Power Input                    | Both inputs draw power simultaneously. If one power source fails, the other live source can, acting as a backup, supply enough power to meet the operational needs of the switch.<br><br>12/24/48 VDC Nominal. ( 9.6 to 60 VDC)<br>18 to 30 VAC |
| Power Connector                     | 4-Pin Removable Terminal Block.<br>Grounding screw on metal chassis   |
| Maximum Current Consumption @24 vDC | 360 mA  |
| Maximum Power Consumption @24 vDC   | 8.6 Watts   |
| Overload Current Protection         | Reset-able fuse provides overload current protection  |
| Reverse polarity protection         | The positive and negative inputs can be reversed providing safe and simple power connectivity.  |

### Access Ports

|            |   |
|------------|---|
| RJ45       | 8 shielded RJ45 ports for 10/100Base-TX up to 100 meters ( 328 ft )<br>Auto-negotiation<br>Auto-MDI/MDIX-crossover for use with either crossover over straight-through cable types<br>Ethernet isolation 1500 V   |
| Fiber port | 1 or 2 fixed fiber port models<br>Duplex SC or ST connector<br><br>Simplex ( BIDI, single strand ) SC connector<br>PC and UPC type patch cords supported.<br><br><ul style="list-style-type: none"> <li>• Multimode 50/125 or 62.5/125 micron fiber cable</li> <li>• Single mode 9/125 micron fiber cable</li> </ul><br><ul style="list-style-type: none"> <li>• Multimode 50/125 or 62.5/125 micron fiber cable</li> <li>• Single mode 9/125 micron fiber cable</li> </ul> |

| Fixed Fiber Port Specs | Fiber1 Type        | Transmit (dBm) |       | Receive (dBm) |       | Power Budget (dB) | Wavelength (nm) | IEEE       | Core Size (um) | Modal Bandwidth (MHz *Km) | Maximum Operating Distance |
|------------------------|--------------------|----------------|-------|---------------|-------|-------------------|-----------------|------------|----------------|---------------------------|----------------------------|
|                        |                    | Min            | Max   | Min           | Max   |                   |                 |            |                |                           |                            |
|                        | MMF (Duplex SC/ST) | -20.0          | -12.0 | -31.0         | -14.0 | 11.0              | 1310            | 100Base-FX | 50             | 800*                      | 5 Km<br>3.1 mi             |

|                          |       |      |       |      |      |                            |                                      |      |      |                   |
|--------------------------|-------|------|-------|------|------|----------------------------|--------------------------------------|------|------|-------------------|
|                          |       |      |       |      |      |                            |                                      | 62.5 | 500* | 4 Km<br>2.5 mi    |
|                          |       |      |       |      |      |                            |                                      | 62.5 | 200  | 2 Km<br>1.2 mi    |
| MMF<br>(Simplex<br>SC)   | -15.0 | 0.0  | -28.0 | -8.0 | 13.0 | 1310 / 1550<br>1550 / 1310 | 100Base-<br>BX-U<br>100Base-<br>BX-D | 62.5 | 200  | 2 Km<br>1.2 mi    |
| SMF<br>(Duplex<br>SC/ST) | -18.0 | -7.0 | -32.0 | -3.0 | 14.0 | 1310                       | 100Base-<br>LX                       | 9    | **   | 20 Km<br>12.4 mi  |
| SMF<br>(Simplex<br>SC)   | -14.0 | -8.0 | -32.0 | -3.0 | 18.0 | 1310 / 1550<br>1550 / 1310 | 100Base-<br>BX-U<br>100Base-<br>BX-D | 9    | **   | 20 Km<br>12.4 mi  |
| SMF<br>(Duplex<br>SC/ST) | -5.0  | -0.0 | -34.0 | -3.0 | 29.0 | 1310                       | 100Base-<br>EX                       | 9    | **   | 40 Km<br>24.9 mi  |
| SMF<br>(Simplex<br>SC)   | -8.0  | -3.0 | -33.0 | -3.0 | 18.0 | 1310 / 1550<br>1550 / 1310 | 100Base-<br>BX-U<br>100Base-<br>BX-D | 9    | **   | 40 Km<br>24.9 mi  |
| SMF<br>(Duplex<br>SC/ST) | -5.0  | 0.0  | -34.0 | -3.0 | 29.0 | 1550                       | 100Base-<br>ZX                       | 9    | **   | 80 Km<br>49.7 mi  |
| SMF<br>(Duplex<br>SC/ST) | 0.0   | 5.0  | -35.0 | -3.0 | 35.0 | 1550                       | 100Base-<br>ZX                       | 9    | **   | 120 Km<br>74.6 mi |

\* 1db/km multimode fiber cable

\*\* as per ITU-T G.652 SMF specifications

### Switch Properties

#### Standards

- IEEE 802.3 for 10Base-T
- IEEE 802.3u for 100Base-TX and 100Base-FX
- IEEE 802.3x for Flow Control

Processing Type Store and Forward, non-blocking architecture

MAC Address Table Size 8K

Packet Buffer Memory 1 Mbit

### Indicators

|               |  |
|---------------|--|
| P1            | This green LED is turned on when power is applied to the power #1 input        |
| P2            | This green LED is turned on when power is applied to the power #2 input        |
| RJ45 Ethernet | These integrated colored LEDs indicate link, activity and speed for each port. |
| Fiber Link    | Fiber link LED indicates Link and Data Activity                                |

### Environmental Specifications

|                              |  |
|------------------------------|--|
| Operating Temperature Ranges | Standard temperature models : 0° C to 60° C (32° F to 140° F).<br>Industrial extended temperature models : -40° C to 75° C ( -40 F to 167° F )   |
| Storage Temperature Range    | Minimum range of -25° C to 70° C (-13° F to 158° F). -40 C to 85 C (-40 F to 185 F) for industrial extended temperature models   |
| Operating Humidity Range     | 5% to 90% non-condensing   |
| Storage Humidity Range       | 5% to 95% non-condensing   |
| Operating Altitude           | Up to 3,048 meters (10,000 feet)   |
| Chassis                      | Aluminum with an IP30 ingress protection rating  |
| Din Rail Mountable           | DIN Rail attachment included. Mounts to standard 35 mm DIN rail in accordance with DIN EN 60175.<br>Removable to accommodate optional Panel/Wall mount kit                             |
| Maximum Heat Output          | 29.3 BTU/Hr  |
| MTBF                         | 623,989 hours (without fiber module)<br>389,062 hours (with 1 fiber module)<br>347,577 hours (with 2 fiber modules)<br><i>MTBF Calculation model based on MIL-HDBK-217-FN2 @ 30 °C</i> |

### Product Weight and Dimensions

|            |  |
|------------|--|
| Weight     | 0.32 Kg x 0.7 lbs                              |
| Dimensions | 35.5 x 111 x 138 mm, 1.39 x 4.37 x 5.43 inches |

### Packaging

|                     |   |
|---------------------|---|
| Shipping Weight     | 0.47 Kg, 1.04 lbs   |
| Shipping Dimensions | 170 x 260 x 70 mm, 6.69 x 10.24 x 2.76 inches   |
| Contents Shipped    | Industrial Ethernet Switch with DIN Rail attachment<br>Terminal block<br>Installation guide |

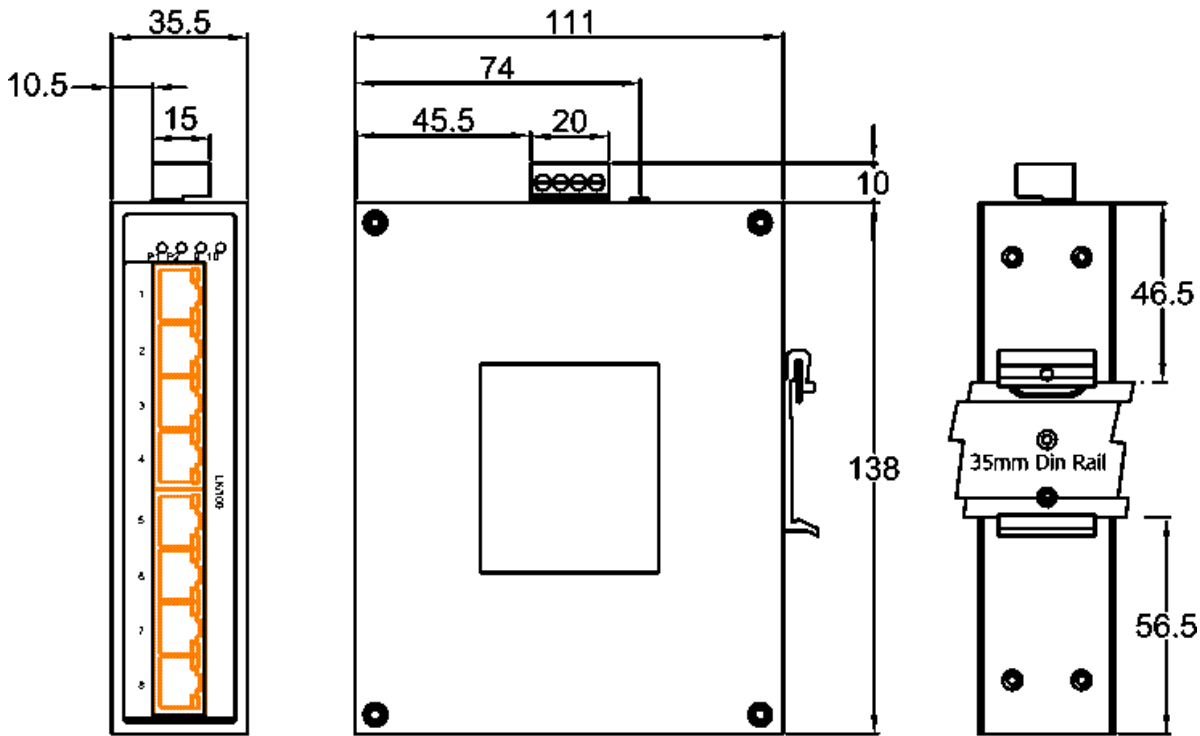
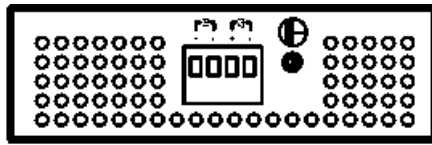
### Standards and Certifications

|                                |  |
|--------------------------------|--|
| Safety                         | <ul style="list-style-type: none"> <li>UL 60950-1</li> <li>CSA C22.2 No. 60950-1</li> <li>IEC 60950-1:2005+A1:2009 and</li> <li>EN 60950-1:2006+A11:2009+A1:2010+A12:2011</li> <li>CE Mark</li> <li>UL508 ( Industrial )</li> </ul>  |
| EMC Emissions                  | <ul style="list-style-type: none"> <li>FCC 47 Part 15 Class A</li> <li>ICES-0003</li> <li>CISPR 22:2008/EN55022:2010 (Class A)</li> <li>EN61000-6-4</li> </ul>   |
| EMC Immunity                   | <ul style="list-style-type: none"> <li>CISPR 24:2010/EN 55024:2010</li> <li>IEC/EN 61000-4-2 (ESD) : Contact discharge +/- 4kV, Air Discharge +/- 8kV</li> <li>IEC/EN 61000-4-3 (RS) : 80 MHz to 2.7 Ghz ; 10V/m, 800 MHz to 1000 MHz; 20V/m</li> <li>IEC/EN 61000-4-4 (EFT) : DC power line +/- 2 kV, Data Line +/- 2kV</li> <li>IEC/EN 61000-4-5 (Surge) : DC power line, Line/Line +/- 1kV, Line/Earth +/- 2kV, Data Line line/earth +/- 1kV</li> <li>IEC/EN 61000-4-6 (CS) : 150kHz to 80 MHz; 10V</li> <li>IEC/EN 61000-4-8 (Magnetic Field): 30 A/m</li> <li>IEC/EN 61000-6-2 ( General Immunity in Industrial Environments )</li> </ul> |
| Industrial Safety              | <ul style="list-style-type: none"> <li>UL508 (Safety standard for Industrial Control Equipment )</li> <li>CSA C22.2 No. 142</li> </ul>   |
| Hazardous Locations ( Hazloc ) | <ul style="list-style-type: none"> <li>ANSI/ISA 12.12.01, Class I Division 2 Groups A-D ( formerly known as UL 1604 )</li> <li>CSA C22.2 No. 213</li> <li>ATEX Class I Zone 2, EN60079-0,15</li> </ul>   |
| Laser Safety                   | <ul style="list-style-type: none"> <li>EN 60825-1:2007</li> <li>Fiber optic transmitters on this device meet Class 1 Laser safety requirements per IEC-60825 FDA/CDRH standards and comply with 21CFR1040.10 and 21CFR1040.11.</li> </ul>  |
| Environmental                  | <ul style="list-style-type: none"> <li><a href="#">Reach, RoHS and WEEE Compliant</a></li> </ul>   |
| Other                          | <ul style="list-style-type: none"> <li>ECCN: 5A991</li> <li>HTSUS Number: 8517.62.0050</li> <li>5 year warranty</li> </ul>   |

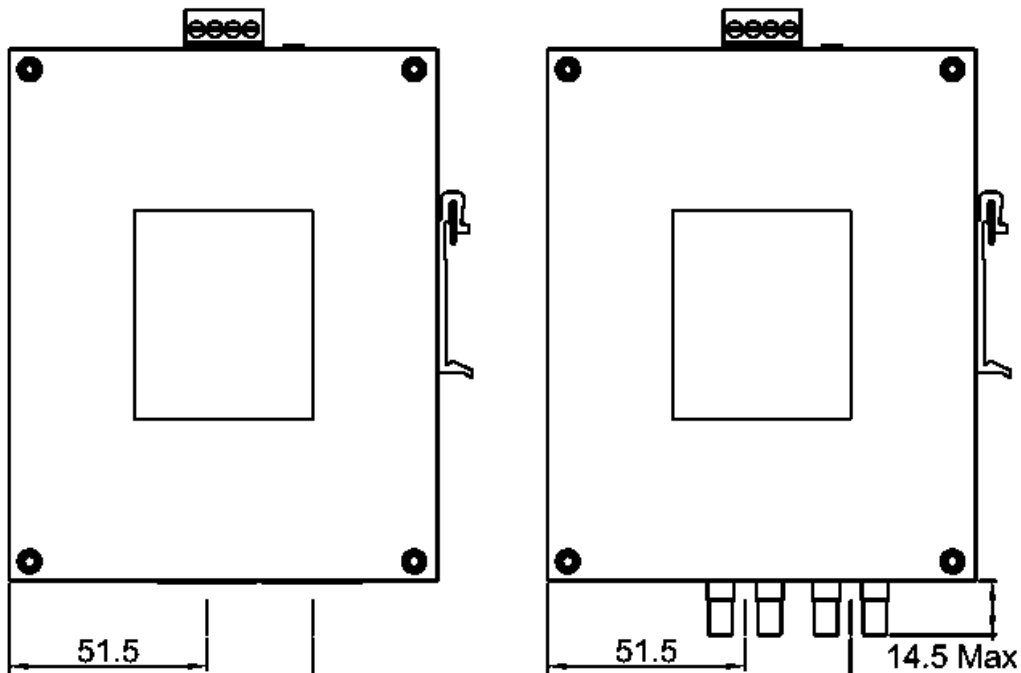
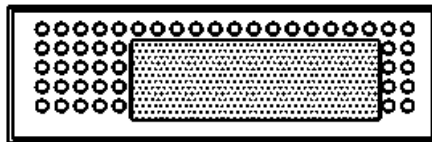
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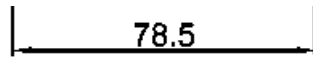
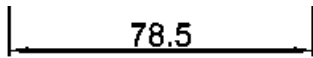
**IDS-108F with Standard DIN Rail**

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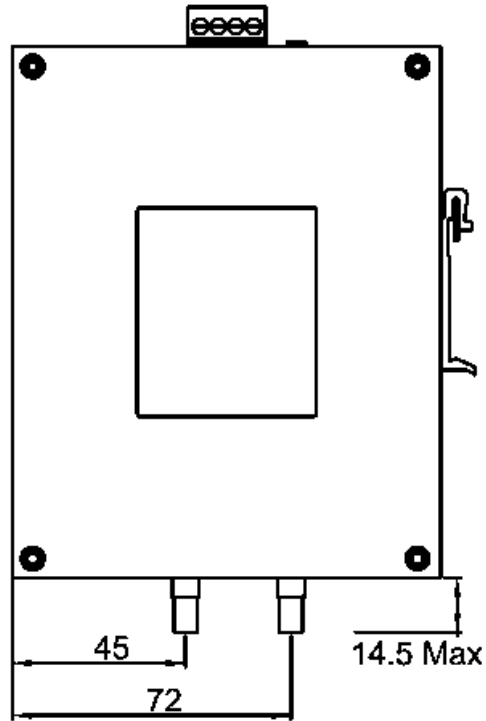
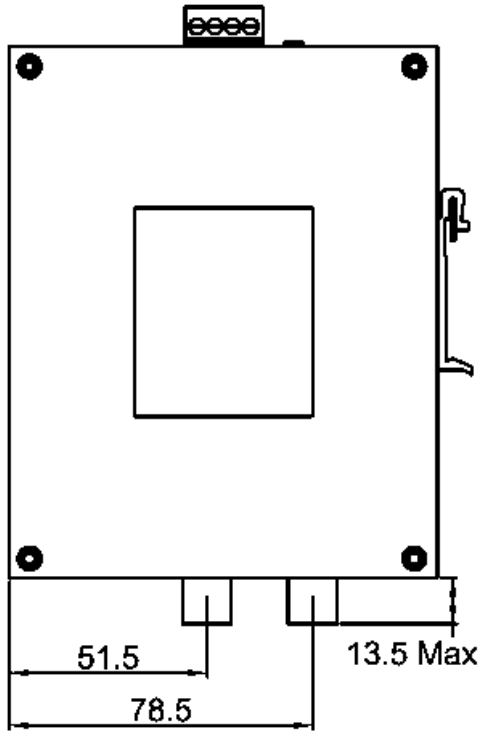
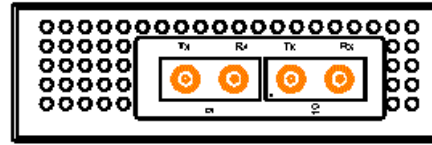
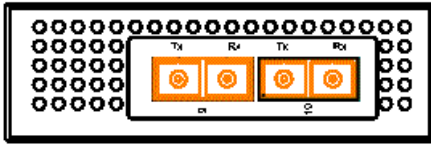
RJ45 Models





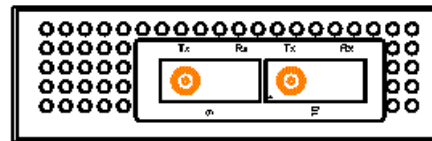
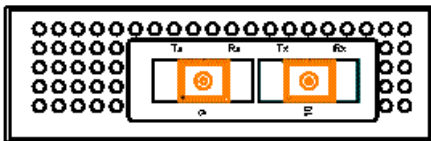
### SC Models

### ST Models

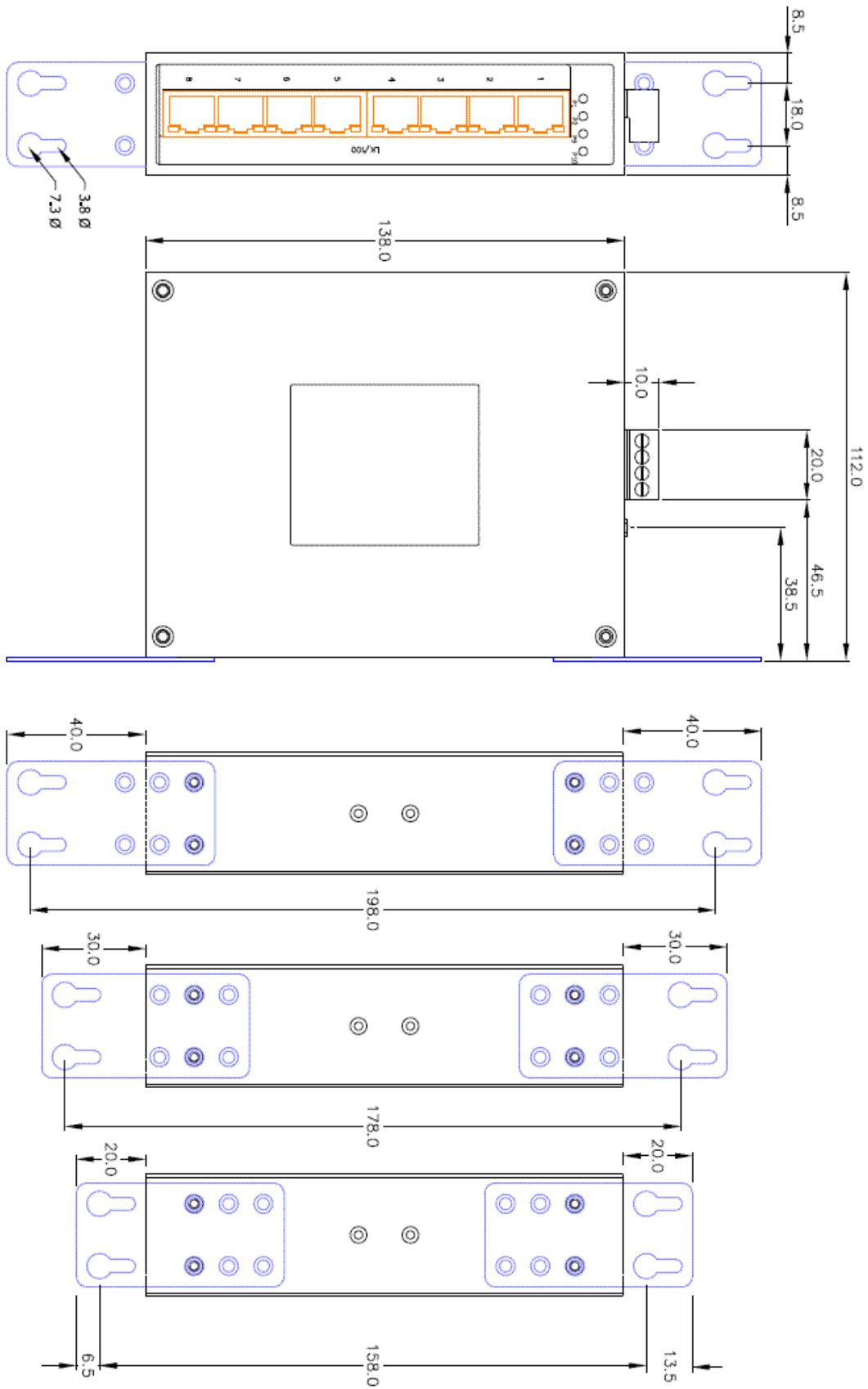


### Single Fiber SC Models

### Single Fiber ST Models

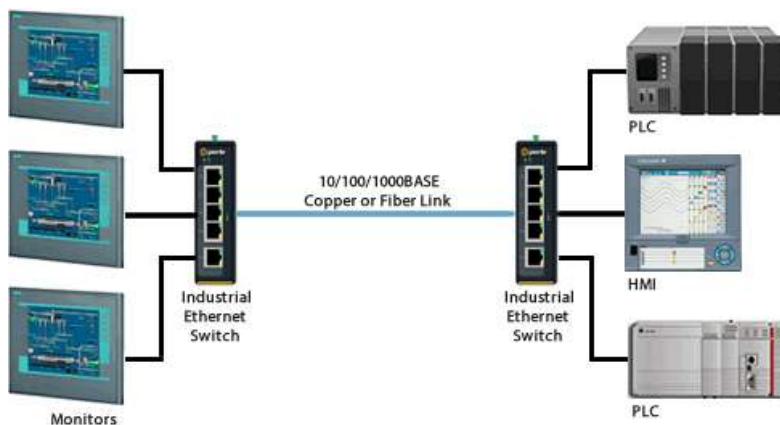


IDS-108F with Optional Wall/Panel Mount Brackets



IDS-108F Industrial Switch Diagram

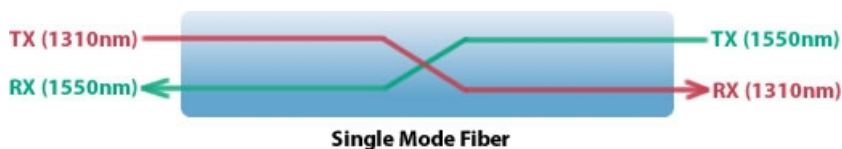




**Single Mode / Single Strand ( WDM ) Fiber**

**Connecting devices over a single fiber strand ( also referred to as “Bi-Directional” BiDi or Simplex)**

To reduce costs, or where there are limits on available fiber, Wavelength-Division Multiplexing (WDM) technology may be utilized. WDM uses separate transmit and receive frequencies to communicate on a single fiber strand. WDM technology relies on the fact that optical fibers can carry many wavelengths of light simultaneously without interaction between each wavelength. Thus, a single fiber can carry many separate wavelength signals or channels simultaneously. WDM systems are divided into different wavelength patterns, conventional/coarse (CWDM) and dense (DWDM).



When Single Strand fiber is used, you will need an “Up” side and a “Down” side when interconnecting fiber devices.

Perle offers a wide variety of Single Fiber (“Up/Down”) Ethernet Switches and Media Converters for use with single strand of fiber.

**Select a Model to obtain a Part Number – IDS-108F**

Std = Standard Temperature models : 0° C to 60° C (32° F to 140° F).  
 Ind = Industrial Extended Temperature Models : -40° C to 75° C ( -40 F to 167° F )

**Duplex Fiber**

| Model                 | Temp | RJ45<br>10/100Base-<br>TX<br>Connectors | Fiber<br>Connector | Transmit<br>(dBm) |       | Receive<br>(dBm) |       | Power<br>Budget<br>(dB) | Wavelength<br>(nm) | Fiber<br>Type | Operating<br>Distance |
|-----------------------|------|---|--------------------|-------------------|-------|------------------|-------|-------------------------|--------------------|---------------|-----------------------|
|                       |      |   |                    | Min               | Max   | Min              | Max   |                         |                    |               |                       |
| IDS-108F              | Std  | 8                                       |                    |                   |       |                  |       |                         |                    |               |                       |
| IDS-108F-XT           | Ind  | 8                                       |                    |                   |       |                  |       |                         |                    |               |                       |
| IDS-108F-<br>M2SC2    | Std  | 8                                       | 1 x Duplex<br>SC   | -20.0             | -12.0 | -31.0            | -14.0 | 11.0*                   | 1310               | MMF           | 5 km*<br>(3.1 mi)     |
| IDS-108F-<br>M2SC2-XT | Ind  | 8                                       | 1 x Duplex<br>SC   | -20.0             | -12.0 | -31.0            | -14.0 | 11.0*                   | 1310               | MMF           | 5 km*<br>(3.1 mi)     |
| IDS-108F-<br>M2ST2    | Std  | 8                                       | 1 x Duplex<br>ST   | -20.0             | -12.0 | -31.0            | -14.0 | 11.0*                   | 1310               | MMF           | 5 km*<br>(3.1 mi)     |

|                                     |     |   |               |       |       |       |       |       |      |     |                 |
|-------------------------------------|-----|---|---------------|-------|-------|-------|-------|-------|------|-----|-----------------|
| <a href="#">IDS-108F-M2ST2-XT</a>   | Ind | 8 | 1 x Duplex ST | -20.0 | -12.0 | -30.0 | -14.0 | 10.0* | 1310 | MMF | 5 km* (3.1 mi)  |
| <a href="#">IDS-108F-S2SC20</a>     | Std | 8 | 1 x Duplex SC | -18.0 | -7.0  | -32.0 | -3.0  | 14.0  | 1310 | SMF | 20 km (12.4 mi) |
| <a href="#">IDS-108F-S2SC20-XT</a>  | Ind | 8 | 1 x Duplex SC | -18.0 | -7.0  | -32.0 | -3.0  | 14.0  | 1310 | SMF | 20 km (12.4 mi) |
| <a href="#">IDS-108F-S2ST20</a>     | Std | 8 | 1 x Duplex ST | -18.0 | -7.0  | -32.0 | -3.0  | 14.0  | 1310 | SMF | 20 km (12.4 mi) |
| <a href="#">IDS-108F-S2ST20-XT</a>  | Ind | 8 | 1 x Duplex ST | -18.0 | -7.0  | -32.0 | -3.0  | 14.0  | 1310 | SMF | 20 km (12.4 mi) |
| <a href="#">IDS-108F-S2SC40</a>     | Std | 8 | 1 x Duplex SC | -5.0  | 0.0   | -34.0 | -3.0  | 29.0  | 1310 | SMF | 40 km (25 mi)   |
| <a href="#">IDS-108F-S2SC40-XT</a>  | Ind | 8 | 1 x Duplex SC | -5.0  | 0.0   | -34.0 | -3.0  | 29.0  | 1310 | SMF | 40 km (25 mi)   |
| <a href="#">IDS-108F-S2ST40</a>     | Std | 8 | 1 x Duplex ST | -5.0  | 0.0   | -34.0 | -3.0  | 29.0  | 1310 | SMF | 40 km (25 mi)   |
| <a href="#">IDS-108F-S2ST40-XT</a>  | Ind | 8 | 1 x Duplex ST | -5.0  | 0.0   | -34.0 | -3.0  | 29.0  | 1310 | SMF | 40 km (25 mi)   |
| <a href="#">IDS-108F-S2SC80</a>     | Std | 8 | 1 x Duplex SC | -5.0  | 0.0   | -34.0 | -3.0  | 29.0  | 1550 | SMF | 80 km (50 mi)   |
| <a href="#">IDS-108F-S2ST80</a>     | Std | 8 | 1 x Duplex ST | -5.0  | 0.0   | -34.0 | -3.0  | 29.0  | 1550 | SMF | 80 km (50 mi)   |
| <a href="#">IDS-108F-S2SC120</a>    | Std | 8 | 1 x Duplex SC | 0.0   | 5.0   | -35.0 | -3.0  | 35.0  | 1550 | SMF | 120 km (75 mi)  |
| <a href="#">IDS-108F-S2ST120</a>    | Std | 8 | 1 x Duplex ST | 0.0   | 5.0   | -35.0 | -3.0  | 35.0  | 1550 | SMF | 120 km (75 mi)  |
| <a href="#">IDS-108F-DM2SC2</a>     | Std | 8 | 2 x Duplex SC | -20.0 | -12.0 | -31.0 | 14.0  | 11.0* | 1310 | MMF | 2 km (1.2 mi)   |
| <a href="#">IDS-108F-DM2SC2-XT</a>  | Ind | 8 | 2 x Duplex SC | -20.0 | -12.0 | -31.0 | 14.0  | 11.0* | 1310 | MMF | 2 km (1.2 mi)   |
| <a href="#">IDS-108F-DM2ST2</a>     | Std | 8 | 2 x Duplex ST | -20.0 | -12.0 | -31.0 | 14.0  | 11.0* | 1310 | MMF | 2 km (1.2 mi)   |
| <a href="#">IDS-108F-DM2ST2-XT</a>  | Ind | 8 | 2 x Duplex ST | -20.0 | -12.0 | -30.0 | 14.0  | 10.0* | 1310 | MMF | 2 km (1.2 mi)   |
| <a href="#">IDS-108F-DS2SC20</a>    | Std | 8 | 2 x Duplex SC | -18.0 | -7.0  | -32.0 | -3.0  | 14.0  | 1310 | SMF | 20 km (12.4 mi) |
| <a href="#">IDS-108F-DS2SC20-XT</a> | Ind | 8 | 2 x Duplex SC | -18.0 | -7.0  | -32.0 | -3.0  | 14.0  | 1310 | SMF | 20 km (12.4 mi) |
| <a href="#">IDS-108F-DS2ST20</a>    | Std | 8 | 2 x Duplex ST | -18.0 | -7.0  | -32.0 | -3.0  | 14.0  | 1310 | SMF | 20 km (12.4 mi) |
| <a href="#">IDS-108F-DS2ST20-XT</a> | Ind | 8 | 2 x Duplex ST | -18.0 | -7.0  | -32.0 | -3.0  | 14.0  | 1310 | SMF | 20 km (12.4 mi) |

|                                     |     |   |               |      |     |       |      |      |      |     |                |
|-------------------------------------|-----|---|---------------|------|-----|-------|------|------|------|-----|----------------|
| <a href="#">IDS-108F-DS2SC40</a>    | Std | 8 | 2 x Duplex SC | -5.0 | 0.0 | -34.0 | -3.0 | 29.0 | 1310 | SMF | 40 km (25 mi)  |
| <a href="#">IDS-108F-DS2SC40-XT</a> | Ind | 8 | 2 x Duplex SC | -5.0 | 0.0 | -34.0 | -3.0 | 29.0 | 1310 | SMF | 40 km (25 mi)  |
| <a href="#">IDS-108F-DS2ST40</a>    | Std | 8 | 2 x Duplex ST | -5.0 | 0.0 | -34.0 | -3.0 | 29.0 | 1310 | SMF | 40 km (25 mi)  |
| <a href="#">IDS-108F-DS2ST40-XT</a> | Ind | 8 | 2 x Duplex ST | -5.0 | 0.0 | -34.0 | -3.0 | 29.0 | 1310 | SMF | 40 km (25 mi)  |
| <a href="#">IDS-108F-DS2SC80</a>    | Std | 8 | 2 x Duplex SC | -5.0 | 0.0 | -34.0 | -3.0 | 29.0 | 1550 | SMF | 80 km (50 mi)  |
| <a href="#">IDS-108F-DS2ST80</a>    | Std | 8 | 2 x Duplex ST | -5.0 | 0.0 | -34.0 | -3.0 | 29.0 | 1550 | SMF | 80 km (50 mi)  |
| <a href="#">IDS-108F-DS2SC120</a>   | Std | 8 | 2 x Duplex SC | 0.0  | 5.0 | -35.0 | -3.0 | 35.0 | 1550 | SMF | 120 km (75 mi) |
| <a href="#">IDS-108F-DS2ST120</a>   | Std | 8 | 2 x Duplex ST | 0.0  | 5.0 | -35.0 | -3.0 | 35.0 | 1550 | SMF | 120 km (75 mi) |

\* 1db/km multimode 50/125 micron fiber cable

### Single Fiber ( Simplex / BiDi ) Models ( Recommended use in pairs )

#### Simplex ( BiDi ) Fiber

| Model                            | Temp | RJ45<br>10/100Base-<br>TX<br>Connectors | Fiber<br>Connector | Transmit<br>(dBm) |     | Receive<br>(dBm) |      | Power<br>Budget<br>(dB) | Wavelength<br>(nm)<br>TX / RX | Fiber<br>Type | Operating<br>Distance |
|----------------------------------|------|---|--------------------|-------------------|-----|------------------|------|-------------------------|-------------------------------|---------------|-----------------------|
|                                  |      |   |                    | Min               | Max | Min              | Max  |                         |                               |               |                       |
| <a href="#">IDS-108F-M1SC2U</a>  | Std  | 8                                       | 1 x Simplex SC     | -15.0             | 0.0 | -28.0            | -8.0 | 13.0                    | 1310 / 1550                   | MMF           | 2 km (1.2 mi)         |
| <a href="#">IDS-108F-M1SC2D</a>  | Std  | 8                                       | 1 x Simplex SC     | -15.0             | 0.0 | -28.0            | -8.0 | 13.0                    | 1550 / 1310                   | MMF           | 2 km (1.2 mi)         |
| <a href="#">IDS-108F-DM1SC2U</a> | Std  | 8                                       | 2 x Simplex SC     | -15.0             | 0.0 | -28.0            | -8.0 | 13.0                    | 1310 / 1550                   | MMF           | 2 km (1.2 mi)         |
| <a href="#">IDS-108F-DM1SC2D</a> | Std  | 8                                       | 2 x Simplex SC     | -15.0             | 0.0 | -28.0            | -8.0 | 13.0                    | 1550 / 1310                   | MMF           | 2 km (1.2 mi)         |
| <a href="#">IDS-108F-M1ST2U</a>  | Std  | 8                                       | 1 x Simplex ST     | -15.0             | 0.0 | -28.0            | -8.0 | 13.0                    | 1310 / 1550                   | MMF           | 5 km (3.1 mi)         |
| <a href="#">IDS-108F-M1ST2D</a>  | Std  | 8                                       | 1 x Simplex ST     | -15.0             | 0.0 | -28.0            | -8.0 | 13.0                    | 1550 / 1310                   | MMF           | 5 km (3.1 mi)         |
| <a href="#">IDS-108F-DM1ST2U</a> | Std  | 8                                       | 2 x Simplex ST     | -15.0             | 0.0 | -28.0            | -8.0 | 13.0                    | 1310 / 1550                   | MMF           | 5 km (3.1 mi)         |
| <a href="#">IDS-108F-DM1ST2D</a> | Std  | 8                                       | 2 x Simplex ST     | -15.0             | 0.0 | -28.0            | -8.0 | 13.0                    | 1550 / 1310                   | MMF           | 5 km (3.1 mi)         |

|                                      |     | 8 - 10 Port Industrial Ethernet Switch   IDS-108F   Perle |                |       |      |       |      |      |             |     |                 |  |
|--------------------------------------|-----|---|----------------|-------|------|-------|------|------|-------------|-----|-----------------|--|
| <a href="#">IDS-108F-S1ST20U</a>     | Std | 8   | 1 x Simplex ST | -14.0 | -8.0 | -32.0 | -3.0 | 18.0 | 1310 / 1550 | SMF | 20 km (12.4 mi) |  |
| <a href="#">IDS-108F-S1ST20D</a>     | Std | 8   | 1 x Simplex ST | -14.0 | -8.0 | -32.0 | -3.0 | 18.0 | 1550 / 1310 | SMF | 20 km (12.4 mi) |  |
| <a href="#">IDS-108F-DS1ST20U</a>    | Std | 8   | 2 x Simplex ST | -14.0 | -8.0 | -32.0 | -3.0 | 18.0 | 1310 / 1550 | SMF | 20 km (12.4 mi) |  |
| <a href="#">IDS-108F-DS1ST20D</a>    | Std | 8   | 2 x Simplex ST | -14.0 | -8.0 | -32.0 | -3.0 | 18.0 | 1550 / 1310 | SMF | 20 km (12.4 mi) |  |
| <a href="#">IDS-108F-S1SC20U</a>     | Std | 8   | 1 x Simplex SC | -14.0 | -8.0 | -32.0 | -3.0 | 18.0 | 1310 / 1550 | SMF | 20 km (12.4 mi) |  |
| <a href="#">IDS-108F-S1SC20D</a>     | Std | 8   | 1 x Simplex SC | -14.0 | -8.0 | -32.0 | -3.0 | 18.0 | 1550 / 1310 | SMF | 20 km (12.4 mi) |  |
| <a href="#">IDS-108F-S1SC20U-XT</a>  | Ind | 8   | 1 x Simplex SC | -14.0 | -8.0 | -32.0 | -3.0 | 18.0 | 1310 / 1550 | SMF | 20 km (12.4 mi) |  |
| <a href="#">IDS-108F-S1SC20D-XT</a>  | Ind | 8   | 1 x Simplex SC | -14.0 | -8.0 | -32.0 | -3.0 | 18.0 | 1550 / 1310 | SMF | 20 km (12.4 mi) |  |
| <a href="#">IDS-108F-DS1SC20U</a>    | Std | 8   | 2 x Simplex SC | -14.0 | -8.0 | -32.0 | -3.0 | 18.0 | 1310 / 1550 | SMF | 20 km (12.4 mi) |  |
| <a href="#">IDS-108F-DS1SC20D</a>    | Std | 8   | 2 x Simplex SC | -14.0 | -8.0 | -32.0 | -3.0 | 18.0 | 1550 / 1310 | SMF | 20 km (12.4 mi) |  |
| <a href="#">IDS-108F-DS1SC20U-XT</a> | Ind | 8   | 2 x Simplex SC | -14.0 | -8.0 | -32.0 | -3.0 | 18.0 | 1310 / 1550 | SMF | 20 km (12.4 mi) |  |
| <a href="#">IDS-108F-DS1SC20D-XT</a> | Ind | 8   | 2 x Simplex SC | -14.0 | -8.0 | -32.0 | -3.0 | 18.0 | 1550 / 1310 | SMF | 20 km (12.4 mi) |  |
| <a href="#">IDS-108F-S1SC40U</a>     | Std | 8   | 1 x Simplex SC | -8.0  | -3.0 | -33.0 | -3.0 | 25.0 | 1310 / 1550 | SMF | 40 km (25 mi)   |  |
| <a href="#">IDS-108F-S1SC40D</a>     | Std | 8   | 1 x Simplex SC | -8.0  | -3.0 | -33.0 | -3.0 | 25.0 | 1550 / 1310 | SMF | 40 km (25 mi)   |  |
| <a href="#">IDS-108F-DS1SC40U</a>    | Std | 8   | 2 x Simplex SC | -8.0  | -3.0 | -33.0 | -3.0 | 25.0 | 1310 / 1550 | SMF | 40 km (25 mi)   |  |
| <a href="#">IDS-108F-DS1SC40D</a>    | Std | 8   | 2 x Simplex SC | -8.0  | -3.0 | -33.0 | -3.0 | 25.0 | 1550 / 1310 | SMF | 40 km (25 mi)   |  |

### Industrial Ethernet Switch Accessories

|   |   |
|---|---|
| <a href="#">Panel Mount kit PM3</a>       | Brackets for attaching 30 to 45 mm wide Perle IDS industrial switches inside a control panel or to a wall.  |
| <a href="#">Rack Mount Kit RM4U</a>       | Bracket for mounting one or more Perle DIN Rail switches in a standard 19" rack. Occupies "4U" of vertical rack space. 275 mm ( 10 inches ) deep  |
| <a href="#">DIN Rail 24V Power Supply</a> | IDPS-24-40-XT - DIN-Rail 24 VDC , 40Watt power supply with universal 85 to 264 VAC or 120-370 VDC input , -20 to 70°C extended operating temperature. <a href="#">Power Supply Specifications</a> . |