## 5-Port Industrial Ethernet Switches | IDS-105FE

perle.com/products/switches/ids-105fe-5-port-unmanaged-industrial-ethernet-switch.shtml

## IDS-105FE Industrial Ethernet Switch

## 5-port Compact DIN Rail Switch

- $5 \times$ RJ45 ports with $10 / 100 \mathrm{Mbps}$ on all ports
- Redundant dual power input 12/24/48 VDC
- Reverse polarity protection
- Fan-less design with no moving parts
- -10 to 60C industrial operating temperature support
- QoS (Quality of Service) prioritized messages

The Perle IDS-105FE Industrial Ethernet Switch is designed for easy deployment in industrial environments with harsh operating conditions and limited space. Designed to stand up to extreme temperatures, surges, vibrations, and shocks found in industrial
 automation, infrastructure, transportation, security, oil and gas, and mining the IDS105FE Switch is an economical easy-to-use device, that provide essential industrial Ethernet networking functionality.

This unmanaged switches support 9 to 55VDC redundant power input and provide a relay alarm for power failure. The full/half-duplex auto-negotiation and auto MDI/MDIX operation simplifies installation and setup for convenient connection of a variety of network devices. And, QoS support allows for traffic prioritization and effective management of resources.

For automation and industrial control systems using EtherNet/IP, this rugged, DIN rail mountable switches with metal housing provides security and easy installation (mounting kit is included).

Hardware \& Technical Specifications: IDS-105FE Industrial Ethernet Switch

## Interfaces

$5 \times$ RJ45 ports for 10/100Base-TX up to 100 meters ( 328 ft )
Auto-negotiation
RJ45
Auto-MDI/MDIX-crossover for use with either crossover over straight-through cable types

Ethernet isolation 1500 V

## Power

| Power Input | 12/24/48VDC (9-55VDC) |
| :--- | :--- |
| Power Consumption | 1.82W Max. 0.14A@12VDC / 0.07A@24VDC, <br> 0.038A@48VDC |
| Maximum Current <br> Consumption @ 24VDC | 0.14A@12VDC / 0.07A@24VDC, 0.038A@48VDC  <br> Power Connector 3-Pin Removable Terminal Block <br> Overload Current Reset-able fuse provides overload current protection <br> Protection The positive and negative inputs can be reversed providing <br> safe and simple power connectivity. <br> Reverse Polarity <br> Protection  <br> Switch Properties  |


|  | IEEE 802.3u 100BASE-TX/FX |
| :--- | :--- |
| Standards | IEEE802.3x full-duplex flow control |
|  | IEEE 802.3az Energy Efficient Ethernet |
|  | IEEE 802.1p Quality of Service (QoS) |
|  | Store-and-Forward |
| Processing Type | Auto Negotiation |
|  | Half-duplex back-pressure |
|  | $802.3 x$ full-duplex flow control |
| Auto MDI/MDIX |  |
| MAC Address Table Size | 1 K |
| Packet Buffer Memory | 448 Kbps |
| Jumbo Frame Size | No |
| Forward/Filtering Rate | 14,880 pps for 10Mbps |

## Indicators

| Power LED | This LED is green when power is applied |
| :--- | :--- |
| RJ45 / SFP Ethernet LED | Link/Activity (Green), Speed (Yellow) |

## Environmental Specifications

| Operating Temperature Ranges | -10 to $60^{\circ} \mathrm{C}\left(14\right.$ to $\left.140^{\circ} \mathrm{F}\right)$ |
| :---: | :---: |
| Storage Temperature Range | -40 to $85^{\circ} \mathrm{C}\left(-40\right.$ to $\left.185^{\circ} \mathrm{F}\right)$ |
| 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 | Plastic 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. |
| Maximum Heat Output | 6.22 BTU/Hr (max.) |
|  | 10667627 hours |
| MTBF | MTBF Calculation model based on MIL-HDBK-217-FN2 @ $25^{\circ} \mathrm{C}$ |
| Product Weight and Dimensions |  |
| Weight | $0.2 \mathrm{Kg} / 0.44 \mathrm{lbs}$ |
| Dimensions | $26 \times 70 \times 110 \mathrm{~mm} / 1.02$ " $\times 2.76$ " $\times 4.33$ " (W x D x H) |
| Packaging |  |
| Shipping Weight | 0.34 Kg (0.75lb.) |
| Shipping Dimensions | $30 \times 76.3 \times 110 \mathrm{~mm}, 1.18{ }^{\prime \prime} \times 3.05 " \times 4.4 "$ (W x D x H) |
|  | Industrial Ethernet Switch with DIN Rail attachment |
| Contents Shipped | Terminal block |
|  | Installation guide |
| Standards and Certifications |  |
| Safety | UL 62368 |


|  | FCC Part 15 Class A |
| :--- | :--- |
| VCCI Class A |  |
| EMC Emissions | EN 61000-3-2 |
|  | EN 61000-3-3 |
|  | EN 61000-6-4 |
|  | EN 61000-6-2 |
|  | EN 61000-4-2 (ESD) |
| ENC 61000-4-3 (Radiated RFI) |  |
|  | EN 61000-4-4 (Burst) |
|  | EN 61000-4-5 (Surge: $\pm 4 \mathrm{kV}$ line-to-ground) |
|  | EN 61000-4-6 (Induced RFI) |
|  | EN 61000-4-8 (Magnetic field) |
| Industrial | IEC 60068-2-6 Fc (Vibration) |
| IEC 60068-2-27 Ea (Shock) |  |
| Environmental | Reach, RoHS and WEEE Compliant |
| IDS-105FE Industrial Ethernet Switch |  |



5-Port Industrial Ethernet Switch | IDS-105FE | Perle
Part Number: 07017400
IDS-105FE Industrial Switch with $5 \times 10 / 100 \mathrm{Mbps}$ RJ45 Ethernet ports. -10 to 60 C operating temperature.

