



Ethernet Switch



SFP module



BC-2016SFPG



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1-port 10/100/1000Base-T(X) POE to
1port SFP/LC 1000Base-FX 2Km to 120Km.

Overview

The BC-2016SFPG series Industrial POE Media Converter is the ideal solution for powering remote devices such as IP phones, video cameras, wireless access points, alarms, traffic controllers, sensors and tracking devices, etc., which are installed 100m far from a Power over Ethernet switch. In addition to transmitting data, the twisted-pair port also injects power down the cable, allowing a remote Power over Ethernet Device to operate without the need of any additional power source. All Power over Ethernet Powered Devices (IEEE 802.3af/at compliant) are supported, as the BC-2016SFPG series can deliver a full 15.4W / 30W of power to the remote device.

The BC-2016SFPG series is designed to extend the distance of a network by converting Giga Ethernet data between twisted pair cabling and multi-mode or single-mode fiber-optic cabling.

The BC-2016SFPG features a 1000Base-FX fiber port and a 10/100/1000Base-T twisted-pair port. The fiber optic port features SC connector and operating distance from 550m to 120km depending on different Model. The twisted-pair port has an RJ-45 connector with a maximum distance of 100m.

BC-2016SFPG-SFP features a 1000X SFP fiber Port and a 10/100/1000T twisted-pair port. The fiber optic port features a modular SFP slot for any kind of MSA-complaint pluggable 1.25Gbps SFP transceivers.

Many Backbone switch products now support the industry-standard IEEE802.1Q specification for VLANs that send extra-long data packets on the network. The BC-2016SFPG series converters are fully compatible with these long packets, enabling them to be used in modern networks

EMS Standards

- IEC61000-4-2(ESD): +8KV (Contact Discharge), +15KV (Contact Discharge)
- IEC61000-4-3(RS): 10V/M (80-1000MHZ)
- IEC61000-4-4(EFT): power cables +4KV, signal cables +2KV
- IEC61000-4-5(Surge): power cables +4KV CM/+ 2KV DM, signal cables + 2KV
- IEC61000-4-6(RF coupling): 3V (10KHZ-150KHZ),10V (150KHZ-80MHZ)
- IEC61000-4-8(Power Frequency Magnetic Field): 100A/M COUNT 1000A/M 1S TO 3S
- IEC61000-4-12/18(Damped Oscillatory Wave): 2.5KV CM, 1KV DM
- IEC61000-4-10(conducted disturbances): 30A/M
- IEC61000-4-16(common mode): 30V COUNT 300V, 1S
- IEC61000-6-2(Electromagnetic compatibility)
- IEC61850-3(electrical substation)
- IEEE1613 (electric power substations)
- EN50121-4(Rail Traffic)

Ordering information

| Model | Descriptions |
|-------------|------------------------------------------------------------------------------|
| BC-2016SFPG | 1-port 10/100/1000Base-T(X) POE to 1port SFP/LC 1000Base-FX 2Km to 120Km. |

Features

- UTP to fiber media converter
- IEEE 802.3af/at compliant
- RJ-45 port support auto MDI/MDI-X function
- Auto-negotiation speed, half/full-duplex
- Store-and-forward switching architecture
- Support wide operating temperature (-40 °C ~ +85 °C)
- Wide-range redundant power design (12~56VDC)
- Power polarity reverse protect
- Overload current resettable fuse present
- IP-40 protection
- Provide EFT protection for Power line
- Support Ethernet ESD protection
- DIN-Rail and Wall- Mounted Installation

Technical Specifications

| | |
|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Standards | IEEE802.3 10Base-T, IEEE802.3u 100Base-TX IEEE802.3ab 1000Base-T |
| Performance | IEEE802.3z 1000Base-SX/LX standards IEEE802.3x Flow control and back pressure IEEE802.1d Spanning Tree, IEEE802.1Q VLANs |
| Copper Port | IEEE 802.3af/at POE |
| Fiber Port | Conversion Methods : Store and Forward, MAC Address table: 1Kbit Buffer Space: 288Kbit Time Delay: <20µs |
| | Data Rate: 10/100/1000M Connector: RJ45 Distance: 100m |
| | Data Rate: 1.25G Connector: SC as default, FC/ST/SFP Slot Optional Distance: MMF 550/2km,SMF 20/40/80/100/120km, Bi-di:20/40/80/100/120km |
| LED indicators | PWR1: ON=Power Connected PWR2: ON= Power Connected FL/A: ON=Fiber Connected; Active=Data Transmitting TL/A: ON=Copper Connected; Active= Data Transmitting 1000M: ON=1000M Data Rate Transmitting POE: ON=Power Working; Off=No Power |
| Power | Input Voltage: 12~56 VDC, redundant power inputs Protection: Overload Current; Reverse Polarity Power Consumption: <5W (POE excluded) Connector: Terminal Block |
| Environment | Operating Temperature: -40 °C ~ +85 °C Storage Temperature: -40 °C ~ +95 °C Relative humidity: 5-95% (no condensation) |
| Physical Characteristics | Housing: IP40 Protection, Aluminium alloy Installation: DIN-Rail , Wall-Mounted Dimension: 115*81*35mm(device); 220*175*73mm(packing) Weight: 0.30kg(device); 0.43kg(device with packing) |