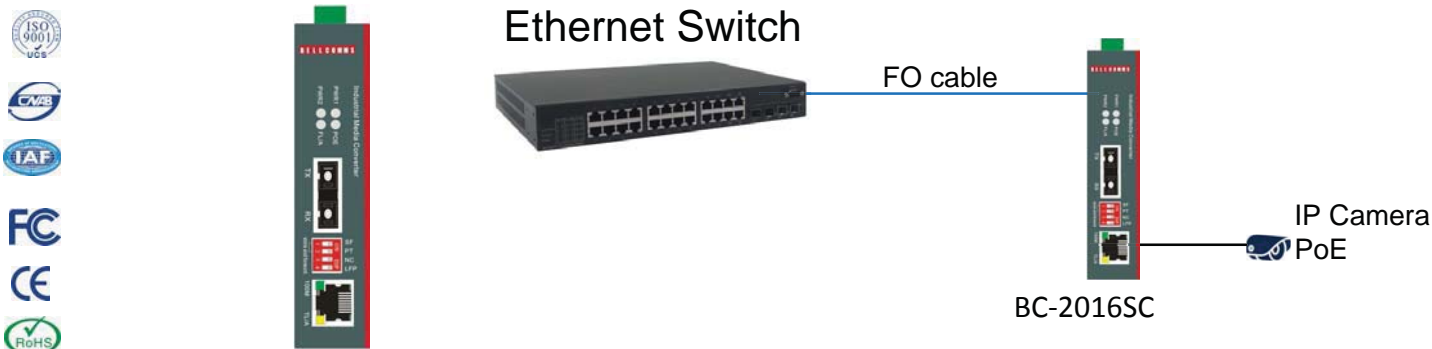


PoE Industrial Ethernet Switch DIN-Rail Unmanaged



BC-2016SC

1-port 10/100Base-T(X) POE to
1port SC 100Base-FX SM Duplex 1310nm 20Km.

Overview

The BC-2016SC 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, 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 complaint) are supported, as the BC-2016SC series can deliver a full 15.4W / 30W of power to the remote device. The BC-2016SC series is designed to extend the distance of a network by converting Fast Ethernet data between twisted pair cabling and multi-mode or single-mode fiber-optic cabling. It will operate in industrial grade temperature, used in traffic management, oil and gas pipelines, weather tracking, industrial and outdoor applications. Additionally, it can be installed by DIN-rail or wall-mount, allowing users to deploy any mix of network conversions required

The BC-2016SC features a 100Base-FX fiber port and a 10/100Base-TX twisted-pair port. The fiber optic port features SC connector and operating distance from 2km to 120km depending on different Model. The twisted-pair port has an RJ-45 connector with a maximum operating distance of 100m. 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-2016SC 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-2016SC	1-port 10/100Base-T(X) POE to 1-port SC 100Base-FX Duplex SM 1310nm 20Km
BC-2016SCA	1-port 10/100Base-T(X) POE to 1-port SC 100Base-FX Simplex SM Bi-di1310nm/1550nm 20Km
BC-2016SCB	1-port 10/100Base-T(X) POE to 1-port SC 100Base-FX Simplex SM Bi-di1550nm/1310nm 20Km

Features

- UTP with POE to fiber media converter
- IEEE 802.3af/at complaint
- RJ45 support auto MDI/MDI-X function
- Auto-negotiation speed, half/full-duplex
- Store-and-forward & Cut-thought optional
- Built-in LFP (Link-fault-pass-through) function
- Jumbo frame: 9kbytes
- Wide-range redundant power design (12~56VDC)
- Support wide operating temperature (-40 °C ~ +85 °C)
- 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 10BaseT; IEEE802.3u 100BaseT(X) IEEE802.3x Flow control; IEEE802.1d Spanning Tree, IEEE802.1Q VLANs; IEEE 802.3af/at POE
Performance	Processing Type : Store and Forward, Cut-through MAC Table Size: 1Kbit Buffer Space: 288Kbit Time Delay: < 150µs
Copper Port	Data Rate: 10/100M Connector: RJ45 Distance: 100m
Fiber Port	Data Rate: 155M Connector: SC as default, FC/ST Optional Distance: MMF=2km,SMF =20/40/80/100/120km, Bi-di=20/40/80/100/120km
Dip-switch	Dip1 ON + Dip2 ON = Modified Cut-through Mode Dip1 ON + Dip2 Off = Converter Mode Dip1 Off + Dip2 ON = Cut-through Dip1 Off + Dip2 off = Store and forward mode Dip4 ON = LFP Enable; Dip4 Off = LFP Disable
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 100M: ON=100M Data Rate Transmitting POE: ON=Power Working; Off=No Power
Power	Input Voltage: 12~56 VDC, redundant power inputs Power Consumption: <5W (POE excluded) Protection: Overload Current; Reverse Polarity 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; Aluminum Alloy Installation: DIN-Rail , Wall-Mounted Dimension: 115*81*35mm(device); 220*175*73mm(packing) Weight: 0.30kg(device); 0.43kg(device with packing)