

BC-IRPOEL2-16G-F4

20 Ports Gigabit Managed Industrial PoE Switch

Layer 2 managed Industrial PoE Switch

16X1000Mbps RJ45 +4X1000Mbps SFP+ Console Port: 1XRJ45



Overview

BC-IRPOEL2-16G-F4 is a 20-port gigabit managed industrial Ethernet switch with 16 gigabit PoE RJ45 ports and 4 gigabit optical SFP ports. Each POE port can provide up to 30W of power and can be used for the Powered Devices (PDs) which is compatible with IEEE802.3af/at. It is especially suitable for application scenarios which it is difficult to provide AC power and want to save the wiring costs. EMC Class 4 protection performance; corrugated high-strength aluminum profile shell, IP40 grade, low power consumption design, anti-vibration DIN-rail installation, operating temperature of -40°C-75°C, can work in harsh environments. BC-IR-POEL2-16G-F4 can also support various network management functions: RUN-Ring (self-healing time <10ms), RSTP, VLAN, QoS, SNMPv1/v2c/v3, IEEE802.1X, SSH/SSL, port mirror, port aggregation, etc. The BC-IRPOEL2-16G-F4 is a reliable solution for intelligent transportation, video surveillance and other harsh industrial environments by its rich redundancy, switching and security management features.



Features

Port 6KV lightning protection

- All ports support 6KV lightning protection, PSE short circuit protection, PoE overload, power supply over temperature protection, over voltage protection, surge current protection and other protection features.

AI smart button

- AI Loop Protect: Using the RUN-Ring technology, when the main link of the network transmission fails, the system automatically switches to the backup link, and the fault recovery time can reach as fast as 10ms.
- AI PoE: Detection of PD port and reboot the device automatically when device crash.
- AI VLAN: Isolating ports 1-16 from each other, so that can suppress network storms effectively and improve network performance.
- AI Extend: 1-16 ports support 250 meters long-distance power supply (CAT 5e network cable is suggested).

Powerful application capabilities

- Support 802.1Q VLAN, MAC VLAN, IP VLAN, users can flexibly divide VLAN as needed.
- Support QoS, 8 port queues, support port priority, 802.1P priority, DSCP priority, support SP, WRR, SP+WRR, WFQ priority scheduling algorithm.
- Support ACL, support L2 (Layer 2) ~ L4 (Layer 4) packet filtering function, provide flexible and secure access control policy.
- Support IGMP v1/v2/v3 Snooping, MLD v1/v2 Snooping, to meet the requirements of multi-terminal HD video surveillance or video conference.
- Supports the fast leave mechanism and querier of Layer 2 multicast, supports Layer 2 IPv4 static multicast and Layer 2 IPv6 static multicast.

Full security mechanism

- Completed security authentication mechanism: It supports IEEE 802.1x, Radius, Tacacs+, etc.
- The loop detection mechanism can ensure the stable operation of the network for a long time.
- High security features such as port isolation in VLAN, DHCP-Snooping and IP+MAC+port binding, etc., to further ensure user data security.
- Support multi protections like ARP, IP source and DoS.
- Support declining user access by the port numbers, IP address, and MAC address.

Diverse reliability protection

- Support STP (IEEE 802.1d), RSTP (IEEE 802.1w) and MSTP (IEEE 802.1s) protocols to eliminate Layer 2 loops and implement link backup.
- Supports loop protection, root bridge protection, TC protection, BPDU protection, and BPDU filtering.
- Support relay alarm output functions such as power failure, port disconnection, and PoE power supply abnormality.
- Industrial level 4 protection and anti-jamming capability

Perfect POE power supply function

- Support 802.3af/at standard, built-in high-power power supply, meet the needs of POE scenarios such as security monitoring, wireless coverage, and IP telephony.
- Support PoE power limit and set PoE port priority. When the power exceeds the limit, the power supply of the high-priority port will be given priority.
- Support setting PoE power supply time period, users can control the time period of PoE power supply according to their own needs.
- Support PoE chip status check, users can view the PoE chip temperature, output power and other parameters in real time through the web page.

Features

Flexible and convenient management and maintenance

- Supports various management methods such as Console, Telnet, and SSH.
- Support WEB network management (HTTP, HTTPS, SSL V3), which is simpler and more efficient, and is convenient for users to install and debug.
- Supports file upload and download management in TFTP mode.
- Support SNMP V1/V2/V3 to facilitate device management through the network management platform.
- Support one-stop management and maintenance of FengrunDa Apollo cloud platform, which can realize all-round remote operation and maintenance such as automatic device discovery, network topology management, and remote configuration management of devices.

Specifications

Hardware	
Network Interface	<ul style="list-style-type: none">• 16-Port 10/100/1000Mbps RJ45• 4-Port 10/100/1000Mbps SFP module• Console ports x1
Network Protocol	<ul style="list-style-type: none">• IEEE802.3、IEEE802.3i、IEEE802.3u、IEEE802.3ab、IEEE802.3z、IEEE802.3ad、IEEE802.3x、IEEE802.3af/at、IEEE802.1p、IEEE802.1q、IEEE802.1w、IEEE802.1d、IEEE802.1s
Performance	<ul style="list-style-type: none">• Switching capacity:40Gbps (Non-Block)• Forwarding ratet: 29.8Mpps• Packet buffer: 4.1Mb• Forwarding model: Store and forward
LED Indicator	<ul style="list-style-type: none">• Power Indicator: P1,P2• System Indicator: SYS• Alarm Indicator: ALM• SFP Port Indicator: Link&Act F1~F2• RJ45 Port Indicator: POE&Link&Act 1~8
POE Pin	<ul style="list-style-type: none">• 1/2 (+) , 3/6(-);
Power Supply	<ul style="list-style-type: none">• Input voltage: 48-56V DC• Input port: Pluggable 5 pin terminals block, 5.08mm pitch (support dual DC power source backup, built-in overcurrent protection, support anti-reverse connection)• No-load power: 6W@52V DC• Full load power: 486W@52V DC (POE full load output)• Max. power for single port: 30W
Physical Parameter	<ul style="list-style-type: none">• Casing: Corrugated high-strength metal housing, IP40• Installation: DIN-Rail• Dimension (LxWxH) : 164mm×130mm×78.8mm
Environmental Condition	<ul style="list-style-type: none">• Operating Temperature: -40~75°C• Storage Temperature: -40~85°C• Operating Humidity: 5%~95% RH (non-condensing)• Storage Humidity: 0%~95% RH (non-condensing)
Certification	<ul style="list-style-type: none">• CE/ROHS/FCC