



5-Port Hybrid PoE Switch

DC12~54V Input, PoE++ &

24V Passive PoE Output



FusionPoE-5P

Key Features:

Ports: Provide 3*Gigabit PoE++ ports, 1*Gigabit 24V Passive POE, 1*Gigabit RJ45 Uplink

PoE Standard: IEEE802.3af/at/bt Power over Ethernet (PoE) Compliant Up to 60W

Power Voltage: Ultra wide pressure input DC 12V~54V

Self-adaption: RJ45 port supports 10/100/1000Mbps Auto MDI/MDIX.

Wide Application: Designed for Wifi AP and IP Security camera. VoIP etc

Surge protection: Protect the device from lighting surges and others electrical hazards

Working Temperature: -40 to 75 degrees operating temperature

Considerate Design: IP40 Industrial design with dual power input

12V to 54V Boost PoE Conversion

This FusionPoE switch features integrated voltage boosting. It accepts ANY 12-54V DC input - harnessing solar panels (12V), vehicle batteries (12V), building power (24V), or industrial systems (36/48/54V) to power it. And output 3-Port 802.3bt PoE++ .



PoE++ (802.3bt) up to 60 W per port				
PoE+ (802.3at) up to 30 W per port				
PoE (802.3af) up to 15.4 W per port				
PoE (24V) Passive PoE				

Up to 60W PoE++ & 24V Passive PoE Output

This Hybrid PoE Switch with 3 ports PoE++ (802.3bt) up to 60W per port— supports PTZ IP cameras, WiFi 6 access points, LED boards. + 24V Passive PoE port for Wireless Bridge. (Risk of DAMAGE! Passive PoE supports ONLY 24V PoE devices.)

Extreme Environment Ready

This outdoor poe switch's IP40 dustproof shield defends against sandstorms. Survives punishing -40°F to 167°F (-40°C to 75°C) swings—from Alaska winters to Arizona summers. No weather downtime on oil rigs, construction sites or remote towers.



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5-Port Hybrid PoE Switch,DC12~54V Input, PoE++ & 24V Passive PoE Output

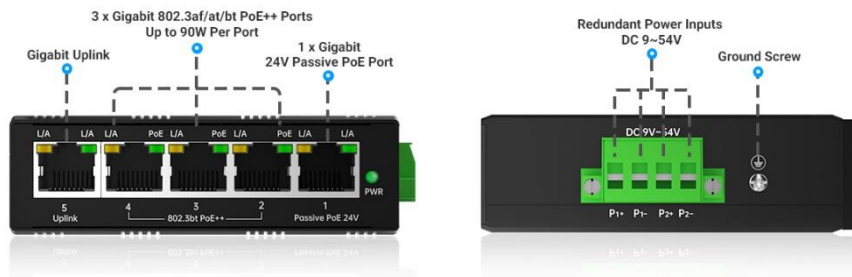
Technical Datasheet

Model	FusionPoE-5P
Hardware Specifications	
Connector	5* 10/100/1000BASE-T RJ45 auto MDI/MDIX ports
PoE Port	3* PoE+ PSE port (Up to 30W) 1* 24V Passive PoE PSE port (Passive PoE supports ONLY 24V PoE devices.)
LED indicators	Power Indicator: PWR(green). Network Indicator: Link/ACT(Yellow) PoE Working Indicator: PoE(green)
Power Connector	Removable 4-pin terminal block Pin 1+/2- for Power 1; Pin 3+/4- for Power 2
Power Requirements	12~54V DC, 6A (max.)
Power Consumption/ Dissipation	Max. 3 watts (system on) Max. 192 watts (Full loading)
ESD Protection	Contact Discharge 6KV DC, Air Discharge 8KV DC
Enclosure	IP40 aluminum case
Thermal Fan	Fanless Design
Installation	Din Rail
Dimension(WxDxH)	30mm x 78mm x 95mm(1.18in x 3.07in x 3.74in)
Weight	0.3Kg
Switching Specifications	
Network standard	IEEE802.3i 10 BASE-T IEEE802.3u 100 BASE-TX IEEE802.3ab 1000BASE-T IEEE802.3z 1000BASE-X IEEE802.3x Flow Control
Switch Architecture	Store and Forward
Backplane bandwidth	10Gbps
Packet forwarding rate	7.44Mpps
MAC address	2k
Shared Data Buffer	4.1 megabits
Jumbo Frame	10 Kbytes
Flow Control	IEEE802.3X full-duplex and Backpressure half-duplex
Environment	
Safety	FCC Part15 Class A,CE.RoHs
Stability Testing	IEC 60068-2-32 (free fall) IEC 60068-2-27 (shock) IEC 60068-2-6 (vibration)
Environment specification	Operating temperature: -40°C~75°C, operating humidity: 5%~95% Storage temperature: -40°C~75°C, storage humidity: 5%~95%

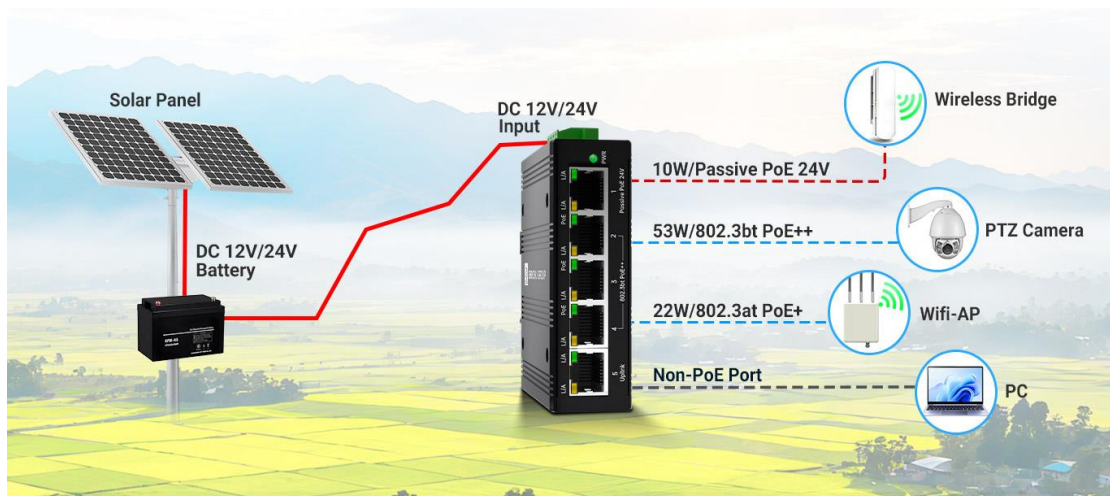
Power over Ethernet (PoE) Specifications

PoE Standard	IEEE 802.3af Power over Ethernet/PSE IEEE 802.3at Power over Ethernet Plus/PSE IEEE 802.3bt Power over Ethernet Plus/PSE
PoE Supply Type	1/2 (+), 3/6 (-)
PoE Power Output	IEEE 802.3af Standard Per port 48V~51V DC, max. 15.4 watts IEEE 802.3at Standard Per port 51V~52V DC, max. 30 watts IEEE 802.3bt Standard Per port 52V~54V DC, max. 60 watts Passive PoE Per port 24V DC, max. 12 watts
PoE Power Budget	DC 12V input: PoE Output Total Budget: 120W DC 24V input: PoE Output Total Budget: 240W DC 48V~54V input: PoE Output Total Budget: 294W

Interface indication



Application



Applicable Scenarios



Solar-Powered Farms

Power PTZ cameras and wireless bridges from a single solar panel and battery. No inverter. No trenching.

Perfect for: Rural farms, wildlife reserves, border monitoring



WISP Base Stations

Direct DC input from solar batteries. Powers backhaul radios (24V Passive) and site cameras, Wi-Fi AP (PoE++) in one switch.

Perfect for: Rural broadband, community Wi-Fi, tower sites



Mobile & Fleet Vehicles

Connect directly to vehicle battery (12V/24V). Powers interior cameras, exterior PTZs, and 4G routers.

Perfect for: Buses, police vehicles, mining trucks, delivery fleets



Industrial & Energy

Takes 24V from control cabinets. Powers industrial cameras, wireless modules, and edge devices. DIN-rail ready.

Perfect for: Oil & gas, mining, factory automation, pipeline monitoring

Ordering Information

FusionPoE-5P

5 Ports 10/100/1000Mbps Hybrid PoE++ switch, IEEE802.3af/at/bt, DC12~54V Input, 6KV surge protection, DIN-Rail Mount

Shenzhen Benchu Group Technology Limited

5F,Block5,GuangmingGu Industrial Park,Matian Villiage,
Guangming Disitrect,Shenzhen,China

Tel:+86-755 23246531 Email: sales@benchu-group.com

www.benchu-group.com



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