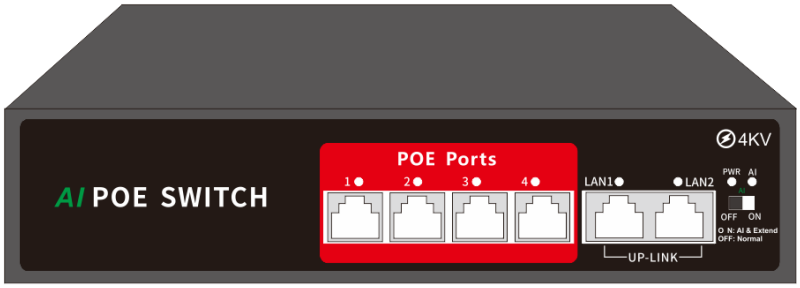
AI Series POE Switch Specification(FEP420F-W65)

1. Product Introduction:

This product is a 100-Mbps Ethernet POE-powered switch independently developed by our company, providing 6 10/100M self-adaptive RJ45 ports. At the same time, ports 1 to 4 have the POE power supply function and can be used as Ethernet-powered devices. All power supply ports can automatically detect and identify power receiving devices that comply with the IEEE 802.3af/at standards. This model supports AI intelligent detection. When the monitoring device has a crash or other network abnormal interruption, it can intelligently restart the POE port device through the AI algorithm; automatically optimize the network: automatically judge the network signal transmission state, intelligently switch the ultra-long-distance mode, and the long-distance transmission is stable without disconnection.



2. Functional Features:

- Follow the IEEE 802.3 Ethernet and IEEE 802.3u Fast Ethernet protocol standards;
- Support 802.3af/at standard protocol, intelligently detects power supply and does not burn non-power devices;
- Over-current, overload and short-circuit protection to eliminate hidden dangers and ensure power supply safety;
- Supports common-mode and differential-mode lightning protection;
- Supports AI intelligent detection mode, automatically detecting and handling abnormal port data and signals;
- It provides 6 10/100M self-adaptive RJ45 ports, among which ports 1 to 4 support POE power supply.
- All ports support the function of automatic flip(Auto MDI/MDIX);
- Support IEEE802.3X full-duplex flow control and Back-pressure half-duplex flow control;
- All ports have line-speed forwarding capability.
- Support the independent learning and aging of MAC addresses;
- All-metal shell, and the whole machine is fully loaded with 65W;

- plug and play;

3. Definitions Of Functional Switch And Indicator Lights



Indicator Light:

Indicator light	Definition	Functional Description
PWR	Power Indicator	ON: The device has been powered on.
AI	AI Mode Start	ON: The function switch is in ON gear, AI function + intelligent ultra-far open
Port Indicator	Link/ACT	ON: the connection is normal. Blinking: the data is being transferred

Switch Specification:

Gear Position	Definition	Functional Description
ON	AI	POE port AI + intelligent ultra-far function is turned on *
OFF	Default	Do not enable AI, Default transmission mode

*AI function: Enable POE port detection. When the connected equipment is abnormal, it automatically detects the powered port equipment, discovers the dead equipment, and immediately cuts off power and automatically restarts the POE (watchdog).

*Intelligent ultra-long: Detect the signal strength status of the port and automatically enable the ultra-long-distance function

4. General Specs

Item	Data
Port Composition	4 100Mbps POE RJ45 ports and 2 100Mbps cascading RJ45 port
Backplane Bandwidth	1.2G
MAC address	2K
Power Supply	AC input 100-240V, standard configuration 65W power supply

Network Medium And Transmission Distance	100Base-TX: 2 pairs to 5 Category(Cat5e) or above UTP/STP(≤100m) 10Base-TX: 2 pairs to super 5 super Category(Cat5e) or above UTP/STP(≤250m)

5. Software Specifications

Item	Data
Basic functions	Follow the IEEE 802.3 Ethernet and IEEE802.3u Fast Ethernet protocol standards Compatible with standard configuration of POE power supply devices that conform to the IEEE802.3af/at Compatible with non-standard configuration of POE power supply devices that conform to the IEEE802.3af/at Store and forward the independent learning and aging of MAC addresses. IEEE802.3X full-duplex flow control and Back-pressure half-duplex flow control
Ethernet Protocols And Standards	IIEEE 802.3 Ethernet Media Access Control Protocol IEEE 802.3i 10BASE-T Ethernet IEEE 802.3u 100BASE-TX Fast Ethernet IEEE 802.3af To achieve the power supply of Ethernet devices through Ethernet data lines or devices IEEE 802.3at To achieve high-power power supply of Ethernet devices through Ethernet data lines or devices IEEE 802.3x Traffic control
Data Transmission Rate	Ethernet 10Mbps half-duplex, 20Mbps full-duplex. Fast Ethernet 100Mbps half-duplex, 200Mbps full-duplex. Gigabit Ethernet 2000Mbps Full-Duplex
System Mode	ON： AI + Intelligent ultra-long mode OFF: Default operating mode

6. POE Performance

Item	Data
IEEE802.3af	Supported
IEEE802.3at	Supported

The Maximum Power Output Of The Port	30W
Over-current Protection	Supported
Over-voltage Protection	Supported
Short Circuit Protection	Supported
Sequential startup (to avoid excessive instantaneous current).	Supported
High power PD soft start.	Supported

7. Environmental Requirements

Environment	Data
Temperature	Operating temperature: 0℃~40℃ Storage temperature: -40℃~70℃
Humidity	Operating humidity: 10% ~ 90% RH non-condensing Storage humidity: 5% ~ 90% RH non-condensing
Altitude	Operating altitude: Maximum 6500 feet (2000 meters) Storage altitude: Maximum 6500 feet (2000 meters)

8. Product Weight

Category	Weight
Naked Machine (Without Packaging)	Approximately 0.65kg
The Entire Box Weight (20 PCS)	Approximately 20.5kg

9. Lightning Surge Protection（10/700us）

Performance	Data
Differential Mode	4KV
Common Mode	4KV

10. Dimensions

Category	Data

Naked Machine	190mm*140mm*43mm (Equipped With Ear Hook)
Whole Machine	220mm*195mm*52mm
Whole Box(20PCS/carton)	415mm*290mm*465mm

11. Packing、Transportation、Storage

Packing Contents	Data
Filled Protection	Integrate inner card protection
Packing Box	Premium cow card cardboard box, sized 415mm*290mm*465mm.
Packing Number	20 PCS(carton)
Others	The packing box should have labels indicating the product model codes and quantity.

Transport Requirement： Domestic designated express logistics can transport the whole box, and it is suitable for transportation by car, ship and plane.During transportation,it should be covered, sun-proof, and loaded and unloaded in a civilized manner.

Store Requirement：

Item	Data
Humidity Environment	5% to 90% RH（relative humidity） without condensation
Temperature Environment	-40 ℃ to 70 ℃, considering in combination with the humidity, the most reasonable state is recommended to be the room temperature condition
Stacking Limit	In the complete packaging state, the maximum upper limit is 4 layers.
Points For Attention	Storage warehouses should be clean, ventilated, free of corrosive gases, free of flammable, explosive and other corrosive chemicals, and away from heat sources, strong mechanical vibration sources.
Storage Cycle	According to the above requirements, reasonable storage can last for one year, and it is recommended to re-examine and use again after two years.