NETCOM POE

REMOTE POWER SUPPLY ETHERNET SWITCH

USER'S MANUAL

NETCOM POE Switch User’s Manual

PREFACE

Version directions:

This manual corresponds to NETCOM POE series versionV1.1.

NETCOM PSE NETCOM POE Series

1. NETCOM POE01

2 .NETCOM POE04

3. NETCOM POE08

Target reader

The reader of this manual is NETCOM POE series users

Related Manuals

This manual explores "Installation Manual" of NETCOM POE series

Article structure

List the basic content of the manual, including the name and main purpose of Chapters.

Chapter 1 System Overview
Describes NETCOM POE features

Chapter2 Structure of electrical connections
Describes the appearance and pin definitions of NETCOM POE

Chapter3 Installation and commissioning
Describes installation and commissioning of NETCOM POE

Chapter4 Routine maintenance
Describes maintenance of NETCOM POE series

Chapter5 Transport storage
Describes the transport issue of NETCOM POE series

CONTENTS

Chapter 1 System Overview

▪Content

✧Features and functions

✧Operating environment

✧Technical features and parameters

This chapter describes features and functions of NETCOM POE series

▪1.1 Features and functions

NETCOM POE which is designed specifically for Telecom carrier . The device implemented advanced MCU control technology. Total power, individual port power, port status and device temperature are displayed on LCD real time. And it has efficient protection of each port. It is used with wireless AP, IP cameras, VOIP and other device that needs network and power supply.

1. LCD display and control panel, display the total power, power of each port, the device temperature, etc. (only for 8 port POE)
2. The entire device or any single port reset (only for 8 port POE)
3. The POE and UPLINK port support automatic MDI/MDI-X function
4. Supply 4 or 8 POE power port, one UPLINK port
5. 10/100Mbps, full/half duplex automatic adapt
6. Compliant with IEEE802.3af, IEEE802.3at standard, 25W Max per port
7. Backplane switching capacity of 1.0Gbps
8. 2K MAC address list

9. Extend the cable transmit distance, furthest to 300m. (only for 4 port POE)

10. Effective short circuit, overload and total power protection

11. Each port with indicator light, alarm light, device alarm light

12. Metal case, with wall mounting hole

▪1.2 Technical features and Specifications

Technology Specifications

IEEE standard	IEEE 802.3 10Base-T Ethernet IEEE 802.3u 100Base-TX Fast Ethernet IEEE 802.3x Flow Control and Back Pressure IEEE 802.3af Power Over Ethernet IEEE 802.3at Power Over Ethernet
switching structure	Back-plane(switch):1.0Gbps Transfer Rate: 14,880pps for Ethernet port 148,800pps for Fast Ethernet port
Transmit rate	Ethernet ：10Mbps half duplex，20Mbps full duplex Fast Ethernet：100Mbps half duplex，200Mbps full duplex
Mac address	2K MAC address list
interface	10/100TX：RJ-45，all ports support automatic MDI/MDI-Xfunction 4 port POE or 8 port POE
Port protection	Effective short circut ,overload and total power protection
Cable type and distance	**10BASE-T：** CAT 3，4，5 UTP （maximum length 100m ） EIA/TIA-568 100 OHM STP（maximum length 100m） **100BASE-TX：** CAT 5E UTP（maximum length 100m） EIA/TIA-568 100 OHM STP （maximum length 100m）

Cable extend distance	200m （only for POE04 switch)
POE PINs	Support A B mode Positive (VCC+)：RJ-45 pin 1，2，4，5 Negative (VCC-)：RJ-45 pin 3，6，7，8 Data (1，2，3，6)
Protocols	CSMA/CD
Power supply	External Power Adaptor (POE04) (100V-240V AC 50Hz-60Hz， DC48V/ 2.5A) Internal power adaptor (POE08) (200V-240V AC 2A 50Hz-60Hz)
Overcurrent protection	Implemented
Storage temperature	-20℃—+70℃
Operating temperature	-10℃ ～+ 50℃ 5%～95% Non-condensing

Dimensions and weight：

	NETCOM POE01	NETCOM POE04	NETCOM POE08
Width	58mm	155.6mm	270mm
Height	38mm	26mm	44mm
Depth	120mm	71.4mm	170mm
Weight	<0.3kg	<0.5kg	<3kg

NETCOM POE series protect function：

Range of output over-voltage protection：52VDC

Over current protection (single channel)：750mA

Over voltage protection：Input voltage is over 260VAC

Over voltage recovery point：Input voltage is below 255VAC

low voltage protection：90VAC(POE04) / 140VAC(POE08)

Voltage recovery point：95VAC (POE04) /165VAC (POE08)

Over-temperature protection：100℃

Chapter2 Electrical connection and structure

▪Contents

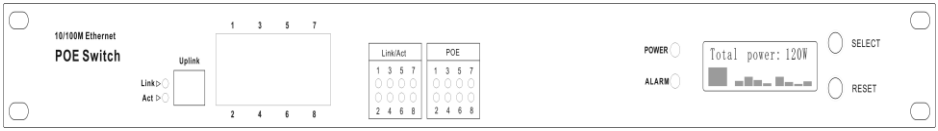
✧The structure and outline picture of NETCOM POE

✧ Display and control panel

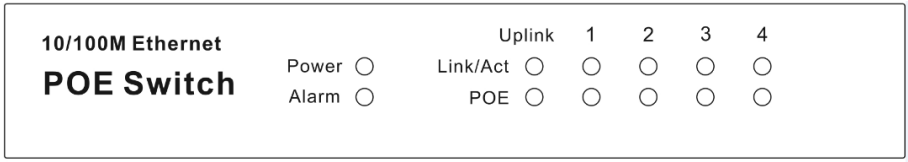
Main content: Introduce the structure and the connection way of NETCOM POE8

▪2.1 The structure and outline picture

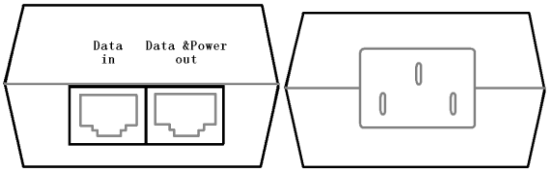
NETCOM POE08



NETCOM POE04



NETCOM PSE01



Ethernet port lights instructions：

POE04 LED Description

Indicator Light	Color	State	Indicator Light signification
Power	Green	on	normal power supply for device
		off	No power supply for the device
Alarm	Red	Flashing	The device with problem of any port or power overload
		off	Normal status
Link/Act(Uplink)	Green	on	Port is connected
		Flashing	Device Port in the transmission or reception of data
		off	Device Port is not connected
POE(Uplink)	Green	on	Device is drawing power from uplink port
		off	Device is not drawing power from uplink port
Link/Act(1-4)	Green	on	Device Port is connected
		Flashing	Device Port in the transmission or reception of data
		off	Device Port is not connected
POE(1-4)	Green	on	Normal power supply for remote device
		Flashing	port overload or other failure
		off	No power supply for remote power supply

POE 8 Power switch LED Description

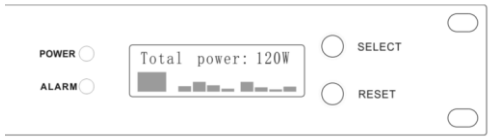
Indicator Light	Color	State	Indicator Light signification
Power	Green	on	normal power supply for device
		off	No power supply for the device
Alarm	Red	Flashing	The device with problem of any port or power overload
		off	Device output port without problem
Link(Uplink)	Green	on	Port is connected
		Flashing	Device Port in the transmission or reception of data
Act(Uplink)	Green	off	Device Port is not connected
		on	The device port receive the remote power supply
Link/Act(1-8)	Green	Flashing	Device Port in the transmission or reception of data
		off	Device Port is not connected
		on	Port connected
POE(1-8)	Green	Flashing	port overload or other failure
		off	No power supply for remote power supply
		on	Normal power supply for remote device

▪2.2 Display and control panel(POE08 only)

The “SELECT” key: Choose a port of display

The “RESET” key: Reset the entire device or the selected port

Ordinary POE devices do not display how much the total power and the

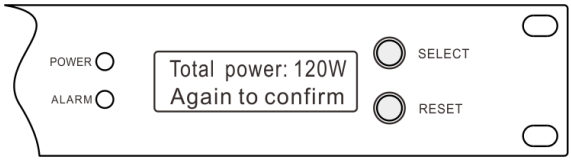


individual port power it used, load the equipment also can not be understand; When a port is overloaded or short circuit, you can not turn off the power output port, there are some security risks; when using a part of the port in the device, the total power is over the device rate power, it works abnormal. To solve these problems, Wanglu Communication Company has developed a more perfect POE device for telecom carrier with liquid crystal display and control panel. Total power, individual port power, port status and device temperature are displayed on LCD, through the front panel, User can reset the whole device or any individual port

⑴ When the device self-test complete, company information, total power, operation temperature, fan state are displayed on LCD

⑵Reset all device ports

In main frame screen state, press the “RESET” key, display “again to confirm”, and press again the RESET key to reset the whole device.

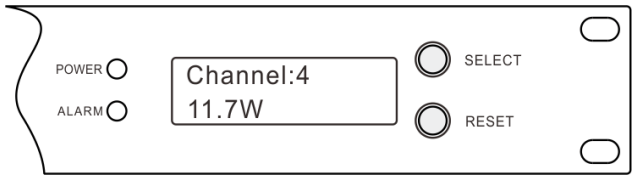


Notice: All channels reset, will cause the power of all the channels shutoff instantaneously.

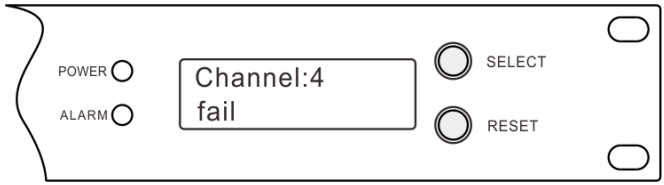
⑶ Display an individual port power or failure

In main frame screen state, press the SELECT key, display selected port, and press the "SELECT" key continuously to choose other ports.

When Channel works normally, display the power value



Channel is abnormal, show-related malfunction



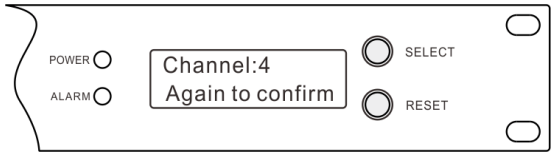
Channel overload display "Overload"

Channel short circuit: Display "fail"

(4) **Reset a port**

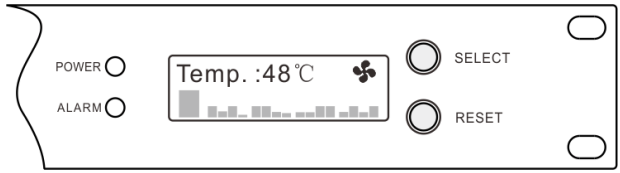
When a channel occurs malfunction, the device will try to return to normal working condition itself twice, if after two attempts it can not return to normal, the device will disable the port with lights flashing, ALARM flash, and the malfunction are displayed on LCD . Construction personnel must check the external device or network cable which connects to the port, after solved problem, it will be working normally after resetting the port.

When display selected channel; Press the "RESET" key, reset the port

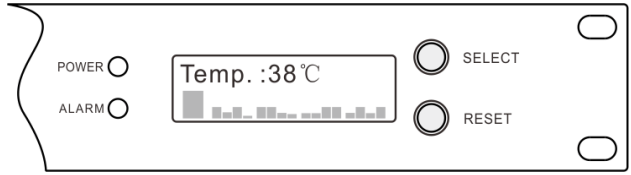


(5)**fan start and stop**

The device has a monitoring temperature features, when the temperature exceeds 42 ℃, the fan start, it can help the device cool down, the fan sign are displayed on LCD



When the temperature dropped below 38 ℃, the fan stop working and the fan sign is off on LCD.



Chapter 3 installation and debugging

▪Content

- ✧ open-case inspection
- ✧ installation
- ✧ start test

Main content: Introduce common operations of installation and debugging of NETCOM POE series

▪3.1 Open case inspection

Check the attachment whether complete, it contains:

1. POE device
   A user's manual
   An input power cable
   48V Power adaptor(POE04 only)
2. Checking the machine whether damaged, deformed or rusty.

   If it is found that the sorts of equipment components or the quantities does not consistent with the description, or equipment is damaged in transit, etc., Please contact us in time.

▪3.2 Installation

(1) Power cord be plugged into 220VAC input socket.

(2) Connecting up the output signal wire individually. (Picture 2-4).

(3) AC power cord, signal wire, the output line be connected fastened, in order to avoid poor contact and loose.

ⓘNotice :

- 1: The POE device must be placed far away from the heat source, source of electromagnetic interference, corrosive gases and metal dirt.
- 2: Do not block the cooling hole of the device.
- 3: Installation must be placed smoothly, without strenuous vibration.
- 4: make sure the AC input voltage range.
- 5: During the installation, it should prevent from Collision and friction between the equipments, to avoid local damage of the machine surface.

▪3.3 Start test

⑴ after loading, it is normal if displayed green light in the output port; light flashes to indicate a short circuit and current limiting phenomena; ALARM light is on, indicating that the device has malfunction.

⑵After the AC power on, the front panel" POWER" light is on.

⑶Total power, company information, the operating temperature and the fan star and stop state etc. are displayed on LCD.

Chapter 4 Routine maintenance

Content

✧Routine maintenance

Main content: Introduce NETCOM POE series routine maintenance and operation.

▪4.1Routine maintenance

NETCOM PSE series can operate successively; it guarantees the reliability for the power supply. To do routine maintenance is necessary, and makes the power system in the best state during the operating.

(1) Clean the power source regular, prevent the dust accumulation

(2) Check the connection of input and output line whether loose or poor contact, if damaged, please change in time.

Chapter 5 Transport and storage

Content

✧ Transport

✧ Storage

Main content: NETCOM POE series transport and the storage that need attention

▪ 5.1 Transport

NETCOM PSE series should be put gently in transit, or prevent it to severe shock. .It should be placed strictly accordance with the box direction, if violated may result in malfunction and damage.

▪ 5.2 Storage

It should keep in dry storage warehouse, no direct sunlight or rain.

The placed direction should be consistent with the box mark, storage period is one year.

The storage temperature: –20℃～+70℃(after storage in low temperature, the restoration time is four hours at least)

Relative humidity: 5%～90%RH