SECURITY TRONIX
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ST-POEAF-S16-RM

16 port PoE switch

User Guide

IMPORTANT

This user's guide contains information on the limitations regarding product use and function and information on the limitations as to liability of the manufacturer. Read the entire guide carefully

Introduction

The ST-POEAF-S16-RM combines a high efficiency 16-port 10/100Mbps Ethernet switch with a standard 802.3 af 16-port Power over Ethernet (PoE) capability. This switch incorporates an external 48VDC power adaptor. Each of the PoE Ethernet ports can provide 15.4 Watts of power as well as 10/100M data transmission over an Inter- connecting Ethernet interface such as Cat 5/ 5e /6 cables.

The ST-POEAF-S16-RM is Power Source Equipment (PSE) and fully compatible with Powered Devices (PD) that comply with the IEEE 802.3 af PoE standard. The ST-POEAF-S16-RM enables users to attach IEEE802.3 af compliant devices such as wireless Access Points (APS), VOIP phone, IP camera, printer and Network Attached Storage (NAS) directly to the ST-POEAF-S16-RM without requiring additional power on the network. The unit was designed with home and small business users in mind and is ideal for installations where AC power is not available or is not cost-effective.

No configuration is required and installation is quick and easy. Support for Auto – MDI / MDI-X on all of the ports eliminates the need for crossover connection to another switch or HUB. Auto - Negotiation on each port senses the link speed of a network device (10 or 100) and intelligently adjusts for compatibility and optimal performance.

* This device is designed for indoor use. Do not use outdoors.
* Installation manual and 48VDC power adaptor included.

Power over Ethernet (PoE) & Features

•**Power Over Ethernet (PoE):**
Power over Ethernet (PoE) integrates 48VDC power and data onto one single cable, eliminating the need to have AC power available at all equipment locations. Power and Data are integrated onto the same cable, supporting category 5/5e up to 100 Meters. PoE provides power to PoE compatible devices, such as VOIP telephones, wireless LAN access points, and IP security cameras.

PoE devices are readily in the market, saving up to 50% of overall installation cost by eliminating the need to install separate electrical wiring and power outlets.

•**Features:**

• 16 x 10/100Mbps auto-negotiation Fast Ethernet RJ-45 ports with PoE function, compliant with IEEE 802.3 af specification.

• Supports PoE power up to 120W for all 16 PoE ports.

• Supports PoE IEEE802.3 af compliant Powered Device (PD)

• Each port supports auto MDI/MDIX, so there is no need to use cross-over cables.

• Full/half duplex transfer mode for each port.

• Wire speed reception and transmission.

• Up to 4K unicast address entities per device. Self-learning and table aging.

• 2.75MBytes packet buffer.

Unpacking and Installation

•**Unpacking**

Open the shipping carton and carefully unpack its contents. The cartons should include following items:
• One ST-POEAF-S16-RM *PoE switch*.

• One 110V~220VAC 48VDC 2.5A power adaptor.

• User's Guide.

If any item is found missing or damaged, please contact your salesperson.

•**Installation:**

The installation of the ST-POEAF-S16-RM requires the following steps:
• The surface must support at least 4.5Kg (10 lbs) for the switch.

• The power outlet should be within 1.5 meters (5 feet) of the switch.

• Visually inspect the DC power jack and make sure that is fully secured to the power adaptor.

Make sure that there is proper heat dissipation from and adequate ventilation around the switch. Do not place any objects on top of the ST-POEAF-S16-RM.

Connecting Network Cables
•**Connecting Network Cables**

The ST-POEAF-S16-RM has 16 10/100Mbps Ethernet ports. All ports are PoE-enabled. Each port incorporates 10/100Mbps support via UTP Cat5/5e cables.

PoE will automatically activate when a compatible device is identified.

Legacy devices that are not compatible will not be supplied power. This feature allows users to freely and safely mix legacy and Power over Ethernet compatible devices on a single network.
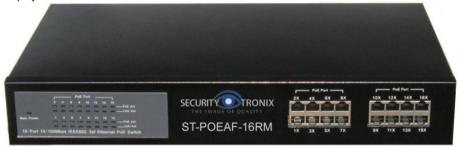
This Switch supports 10Mbps Ethernet or 100Mbps Fast and runs both in half and full duplex mode using two pairs of Category 5 or 5e cable.

All ports are Auto-MDI type port. The switch can auto negotiate to MDII or MDI-X type, so you can connect RJ-45 cable regardless of whether it is a standard or crossover cable.

Description

•**Front Panel:**

This is the front panel of the ST-POEAF-S16-RM, showing the 16 RJ-45 ports and LED display.

• Port 1X to 16X :

Standard 10/100Mbps Ethernet port. The Switch supports 10Mbps Ethernet or 100Mbps Fast Ethernet and runs both in half and full duplex mode using two pairs of Category 5 or 5e cable.

All are 10/100Mbps switch ports as well as 802.3 af PoE enabled ports.

All PoE port will automatically activate when a compatible terminal is identified. The ST-POEAF-S16-RM will supply power through the Ethernet port to the connected PoE device (PD). It also supports legacy devices that are not compatible. In this case the PoE port will not supply power to those devices. This feature allows users to freely and safely mix legacy and Power over Ethernet compatible devices on the same network.

These RJ-45 ports are Auto-MDI type port. This switch can auto negotiate to MDII or MDI-X type, so you can connect the RJ-45 cable regardless of whether it is a standard or crossover cable.

Description

•**DC Power Jack and Power switch:**

 The DC power jack and power switch are located on the rear panel right side of the *ST-POEAF-S16-RM*.

Use only the supplied AC/DC adaptor. The use of any incompatible adaptor may cause damage to the equipment and void the warranty. Press the power switch to turn this device ON or OFF.

Description

•**LED Indicator:**
 The LEDs provides instant status feedback, and helps monitor and troubleshoot when required.

Power LED	LED on: Power ON / LED off: Power off.
LINK/ACT	LED on: this port is Link and Active
	LED off: this port is not correct Link or inactive
PoE	LED on: The PoE power device (PD) is connected and the port is supplying power successfully
	LED off: no PoE power device (PD) connected
Standard	IEEE 802.3 10BASE-T Ethernet
	IEEE 802.3u 100BASE-TX Fast Ethernet
	IEEE 802.3x Full Duplex Flow Control
	IEEE 802.3 af Power over Ethernet
Protocol	CSMA/CD
Data Transfer Rate	Ethernet: 10Mbps (half-duplex), 20Mbps (full-duplex)
	Fast Ethernet: 100Mbps (half-duplex), 200Mbps (full-duplex)
Network Cables	10BASE-T: 2-pair UTP Cat 3, 4, 5 up to 100 meters.
	100BASE-Tx: 2-pair UTP Cat 5, 5e up to 100 meters.
Number of Ports	16 x 10/100Mbps auto-MDIX RJ-45 PoE-enabled ports.
PoE power on RJ-45	Power +: ping 3 & ping 6: Power –" ping 1 & ping 2
AC to DC power adaptor	Input: 100V ~ 160VAC, 50Hz ~ 60Hz.
	Output: 48VDC/1.5A af
Power Consumption	6.4 watts (max with no PD device connected)
	250watts (16 PoE ports af)
Operating Temperature	33℉ ~ 104 ℉
	Storage Temperature: -10℃ ~ 70 ℃ or 14℉ ~ 158 ℉
Humidity	Relative Humidity: 5% - 95%
Dimensions	430mm W x 256mm D x 66mm H
EMI	FCC Class B, CE Mark Class B
Safety	100VAC to 160VAC power adaptor UL listed.
RAM buffer	2.75mb per device
Filtering Address Table	4K entries per device
Packet	10/100Mbps Ethernet: 14,880/148,800
MAC address Learning	Automatic update

For additional support, please contact SecurityTronix Technical Support:
support@securitytronix.com

(800) 688-9282 **Press "3" for Tech Support, then "2" for CCTV Tech Support.**