

machpower®



SCHEDA TECNICA

SWITCH 4 POE + 2 UPLINK 10/100Mbps

60W VLAN up to 250m

MODELLO: SW-UF4P2LV-056

Overview

The SW-UF4P2LV-056 provides 4 ports 10/100Mbps IEEE 802.3af/at Power over Ethernet with a total of 60 watts of PoE budget, which is an ideal solution to fulfill the demand of sufficient PoE power for network applications.

The SW-UF4P2LV-056 is an ideal solution for securing IP surveillance infrastructure. It provides both 802.3af/at PoE functions along with 4x10/100Base-TX ports featuring 15.4-watt 802.3af/30-watt 802.3at PoE in RJ-45 interfaces and extra 2x10/100Mbps UPLINK RJ-45 port to keep a cascade connection with another switch or NVR. For instance, one SW-UF4P2LV-056 can be combined with one 4 channels NVR and 4 PoE IP cameras as a kit for the administrators to centrally and efficiently manage the surveillance system in the local LAN and the remote site via Internet.

With data and power over Ethernet from one unit, the SW-UF4P2LV-056 reduces cabling requirements and eliminates the need for dedicated electrical outlets on the wall, ceiling or any unreachable place. A wire that carries both data and power can lower the installation costs, simplify the installation effort and eliminate the need for electricians or extension cords. Providing 4 PoE interfaces, the SW-UF4P2LV-056 is ideal for small businesses and workgroups requiring deploying the PoE for the wireless access points, IP-based surveillance IP phones in any places easily, efficiently and cost-effectively

Features

Comply with IEEE802.3, IEEE802.3u, IEEE802.3af/at standards

Support IEEE802.3x full-duplex flow control; support Auto MDI/MDIX

4 Ports support 48V-56VDC power to PoE powered devices

Provide 15.4W or 30W power to powered devices

Extra 2 Port 10/100Mbps UPLINK RJ-45

60 watts PoE budget

PoE data & power transmission distance up to 100meters

Port based VLAN for Enhanced Security

Transmission distance max up to 250meters when VLAN is enabled

Excellent anti-thunder, anti-static and anti-interference ability

Surge Protection: 6KV

Restart function helps master IC reset wholly

External 53VDC/1.25A power adaptor included

Easy and convenient to use, plug & play, no need to configure

Galvanized housing for stable and durable working life

Quick Setup Guide

Step1: Begin with all input/output devices turned off with power cables removed

Step2: Connect RJ-45 port of PoE cameras with Downlink RJ-45 port of PoE switches in standard Cat 5e/6 cables

Step3: Connect with Uplink RJ-45 port of PoE switches with RJ-45 port of NVR or computer or other devices in standard Cat 5e/6 cables

Step4: Connect 53VDC/1.25A power adaptor with PoE switches

Step5: Make sure above connection is properly finished, then turn on power

VLAN Introduction

At present, applications of Ethernet switch is very wide. To satisfy the needs of various customers, it is urgent for network services to solve the problems of broadcast domains, bandwidth and security, so a new kind of technology of VLAN emerged.

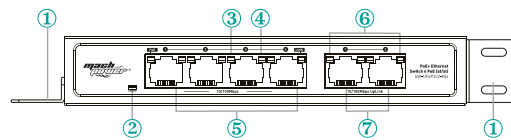
Each DOWNLINK RJ-45 port and UPLINK RJ-45 ports form a separate workstation respectively. In the same VLAN workstation, regardless of which switch they are actually connected to, the communication between them is as if they were on a separate switch. Broadcasts in the same VLAN can only be heard by members of the VLAN, but not in other VLANs, which can control the generation of unwanted broadcast storms. At the same time, if there is no routing, different VLANs cannot communicate with each other, which increases the security of different departments in the enterprise network.

When the VLAN mode is enabled, the data cannot be forwarded UPLINK RJ-45 ports can communicate with each other. The bandwidth of DOWNLINK RJ-45 ports is forced to 10Mbps mode to adapt to the long distance transmission of max 250meters. The bandwidth of UPLINK RJ-45 port is 100Mbps, which keeps a cascade connection with another switch or NVR.

Note:

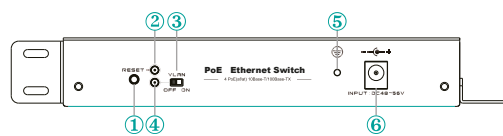
Are you turn on VLAN buon, please press reset button or reboot power the device, then VLAN mode is enabled.

Front panel



- 1. Rack-mounting ears:** Cabinets for product installation or Wall installation
- 2. Power Indicator:** Red Light on: with power; Light off: no power
- 3. PoE Indicator:** Yellow Light on: when device is powered
Light off: when device is not detected or not powered
- 4. Link/ Act Indicator:** Green LED on: link up off: link down blinks: data transfer
- 5. Downlink Port:** Transfer data from other IP devices to the switch
- 6. Uplink Indicator:** Green LED on: link up off: link down blinks: data transfer
Yellow LED on: link speed is 100Mbps off: link speed is 10Mbps
- 7. Uplink Port:** Transfer data from PoE ports to other devices(NVR/Switch/ADSL)

Rear panel

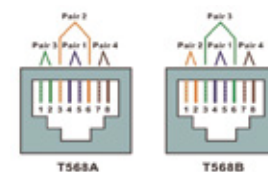


- 1. Reset Button:** Press the reset button to turn on indicator and the device restarts
- 2. Reset Button Indicator:** Green
- 3. VLAN Button:** Turn on VLAN buon: indicator on and VLAN function starts
Turn off VLAN buon: indicator off and VLAN function stops
- 4. VLAN Indicator:** Green
- 5. Ground Connection**
- 6. Input:** DC 48-56V

How to make a network cable

To create a network cable, you will first need the equipment listed below.

1. Cat5e, Cat6, or Cat7 cable
2. RJ-45 connectors
3. Crimping tool
4. Wire stripper or knife



The wire sequence of RJ45 connector must comply with international standard of EIA/TIA 568A or EIA/TIA 568B.

	1	2	3	4	5	6	7	8
T568A	white green	green	white orange	blue	white blue	orange	white brown	brown
T568B	white orange	orange	white green	blue	white blue	green	white brown	brown

1. We recommend stripping at least a half of an inch off the cable to expose the inner wires.
2. Separate the wires within the cable after the network cable jacket has been removed so that they can be put into the RJ-45 connector
3. The CAT5 twisted-pair cable consist of four twisted wires, each color coded; 8 wires must be correctly lined as the standards of EIA/TIA 568A or EIA/TIA568B
4. Cut thread residue and leave 1.5cm wire exposed outside the insulating layer and ensure 8 wire are straighten and neat.
5. Place the cable into the RJ-45 connector and use the crimping tool to attach the connector.
6. Repeat above steps for the other end of the cable; the wire sequence of both ends of the cable is suggested to be identical.
7. Make sure to test the cables before installing them once both ends of the cable have been completed.

Note:

All RJ-45 Ports of this device support Auto MDI/MDIX, so the different wire sequence of both enads of the cable is allowed.

Technical Specification

MODEL	SW-UF4P2LV-056		
Product name	4 ports 10/100Mbps IEEE 802.3af/at PoE switch		
Power Supply	Power Supply mode	Power adaptor	
	Voltage range	DC 48-56V	
	Power consumption	The device <5W PoE power supply ≤60W	
Network port parameter	Network Port	Ethernet downlink port : 10/100Mbps	
		Ethernet 2 uplink port : 10/100Mbps	
	Transmission distance	Downlink port: 100m	
		Mandatory 10Mbps up to 250m	
		Uplink port: 100m	
	Transmission medium	Downlink port: Cat5e/6 standard cable	
		Uplink port: Cat5e/6 standard cable	
	PoE standard	IEEE802.2af/qt standard	
PoE power supply mode	End-span method		
	Each port ≤30W		
PoE power supply wattage	Whole device ≤60W		
Network switch specification	Network standards	IEEE802.3 10base-T	
		IEEE802.3u 100base-TX/FX	
		IEEE802.3az	
	Swap mode	Store and forward	
	Data-caching mechanism	448K	
	MAC address list	1K	
	Throughput	0.89Mbps	
Indicator	Power indicator	Red led on: power on	
	Fast ethernet uplink port	Green led on: link up	
		Green led off: link down	
		Green led blinks: data transfer	
		Yellow led on: link speed is 100Mbps	
		Yellow led off: link speed is 10Mbps	

Indicator	PoE indicator	4 PoE indicator light yellow
	PoE network/PoE indicator	4 ports indicators blink while data transfer
	Rest indicator	Green light on when press reset button
	VLAN indicator	Green light on when press VLAN button
Button	Reset button	Press the reset button to turn indicator green and device restart
	VLAN button	Turn on VLAN button: indicator on and VLAN function restart
Turn off VLAN button: indicator aoff nd VLAN function stops		
Protection level	Surge protection	6KV (common mode), 10/700us IEC61000-4-5 2KV (differential mode), 10/700us IEC61000-4-5
	Electrostatic protection	Contact Discharge: ±4KV
Air Discharge: ±6KV		
Standard: IEC61000-4-2		
Reliability	Mean time btw failures	>50.000h
Mechanical	Dimension (mm)	160L x 94W x 27H
	Housing	Galvanized
	Body color	Black
	Net weight	425g
Environmental	Operating temperature	0°C - 55°C
	Storage temperature	-40°C - 85°C
	Relative Humidity	0 - 95% (non-condensing)

