



# 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 installa- tion 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 whoolly
External 53VDC/1.25A power adapter 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.

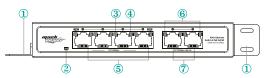
Each DOWNLINK RJ-45 port and UPLINK RJ-45 ports form a separate workstation respectively. In the same VLAN workstation, regardless of which switch they are actually connected to, the communication between them is as if they were on a separate switch. Broadcasts in the same VLAN can only be heard by members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

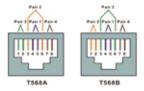
To create a network cable, you will first need the equipment listed below.

1. Cat5e, Cat6, or Cat7 cable

2. RJ-45 connectors

3. Crimping tool

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 greeen	greeen	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.

DATASHEET

# **Technical Specification**

# MELLING | DATASHEET

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	Network standards	IEEE802.3 10base-T			
specification		IEEE802.3u 100base-TX/FX			
		IEEE802.3az			
	Swap mode	Store and forward			
	Data-caching mechanism	448K			
	MAC address list	1К			
	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)		

