



DATASHEET SWITCH 8 POE + 2 UPLINK GIGABIT 120W VLAN FUNCTION MODELLO: SW-UG8P2LV-059

Overview

The SW-UG8P2LV-059 provides 8 port 10/100/1000Mbps IEEE 802.3af/at Power over Ethernet with a total of 120 watts of PoE budget, which is an ideal solution to fulfill the demand of sufficient PoE power for network applications.

The SW-UG8P2LV-059 is an ideal solution for securing IP surveillance infrastructure. It provides both 802.3af/at PoE functions along with 8 x 10/100/1000Base-TX ports featuring 15.4 watts 802.3af/30 watts 802.3at PoE in RJ-45 interfaces and extra 2 x 10/100/1000Mbps UPLINK RJ- 45 port to keep a cascade connection with another switch or NVR. For instance, one SW-UG8P2LV-059 can be combined with one 8 Channel NVR and 8 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-UG8P2LV-059 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 8 PoE interfaces, the SW-UG8P2LV-059 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, IEEE802.3ab, IEEE802.3u, IEEE802.3az, IEEE802.3af/at standards

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

8 Port support 48V-56VDC power to PoE powered devices

Provide 30W power to powered devices

Extra 2-Port 10/100/1000Mbps UPLINK RJ-45

120 watts PoE budget

PoE data & power transmission distance up to 100meters

Port based VLAN for Enhanced Security

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

Surge Protection: 6KV

Restart function helps master IC reset wholly

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: Input AC power cord into power socket of PoE switch

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

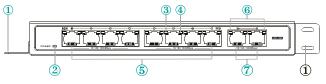
Each DOWNLINK RJ-45 port and UPLINK RJ-45 ports form a separate workstation respectively. In the same VLAN workstation, regardless of which switch they are actually connected to, the communication between them is as if they were on a separate switch. Broadcasts in the same VLAN can only be heard by members of the VLAN, but not in other VLANs, which can control the generation of unwanted broadcast storms. At the sam 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 among DOWNLINK RJ-45 ports, but DOWNLINK RJ-45 ports and UPLINK RJ-45 ports can communicate with each other. The bandwidth of UPLINK RJ-45 port is 1000Mbps, which keeps a cascade connection with another switch or NVR.

Note:

After you turn on VLAN button, 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

Green LED off: link down

Green LED blinks: data transfer

5. Downlink Port: Transfer data from other IP devices to the switch

6.Uplink Indicator: Green LED on: link up

- Green LED off: link down
- Green LED blinks: data transfer
- Yellow LED on: link speed is 10/100/1000Mbps
- Yellow LED off: link speed is 10/100Mbps

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. LAN Button: Turn on VLAN button: indicator on and VLAN function starts Turn on VLAN button: indicator off and VLAN function stops

4. VLAN Indicator: Green

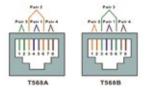
5. Ground Connection

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 internaonal 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 offf 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:

1. 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

METALIAN DATASHEET

MODEL	SW-UG8P2LV-059				
Product name	8 ports 10/100/1000Mbps IEEE 802.3af/at PoE switch				
Power Supply	Power Supply mode	Power adaptor			
	Voltage range	AC 48~56V			
	Power consumption	The device <8W			
		PoE power supply ≤120W			
Network port	Network Port	Ethernet downlink RJ45 port : 8 x 10/100/1000Mbps			
parameter		Uplink port: 2 x 10/100/1000Mbps			
	Transmission distance	Downlink port: 100m			
		Uplink port: 100m			
	Transmission medium	Downlink port: Cat5e/6 standard cable			
		Uplink port: Cat5e/6 standard cable			
	PoE standard	IEEE802.3 af/at standard			
	PoE power supply mode	End-span method			
	PoE power supply wattage	Each port ≤8W			
		Whole device ≤120W			
Network switch	Network standards	IEEE802.3, IEEE802.3ab,			
specification		IEEE802.3u,			
		IEEE802.3az			
	Swap mode	Store and forward			
	Data-caching mechanism	1.5M			
	MAC address list	4K			
	Throughput	14.88Mbps			
Indicator	Power indicator	Red led on: power on			
	Uplink RJ45 port indicator	Green led \rightarrow on: link up / off: link down / blinks:			
		data transfer			
		Yellow LED on: link speed is 1000Mbps			
		Yellow LED off: link speed is 10/100Mbps			
	PoE indicator	8 PoE indicator (yellow)			
	PoE network port indicator	8 port indicators blink white data transfer			

Indicator	Reset indicator	Green light on when press reset button		
	VLAN Indicator	Green light on when press VLAN button		
Button	Reset button	Press the reset button and the device restarts		
	VLAN button	Turn on VLAN on: indicator on and VLAN restarts		
		Turn o ffVLAN on: indicator off and VLAN 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)	219.6L x 105W x 27.6H		
	Housing	Galvanized		
	Body color	Black		
	Net weight	612g		
Environmental	Operating temperature	0°C~ 55°C		
	Storage temperature	-40°C~ 85°C		
	Relative Humidity	0~ 95% (non-condensing)		

