



**WZ-LAN**



## Characteristics

- **240W PoE**  
16× 802.3at/af-compliant PoE+ ports .
- **Full Gigabit Ports:** 16× gigabit PoE+ ports and 2× gigabit SFP provide high-speed connections.
- **Robust Security Strategies:** IP-MAC-Port Binding, ACL, Port Security, DoS Defend, Storm control, DHCP Snooping, 802.1X, Radius Authentication, and more.
- **Switching Capacity**  
56Gbps
- **Supports Web-based GUI, Command Line Interface (CLI) through telnet, SNMP**

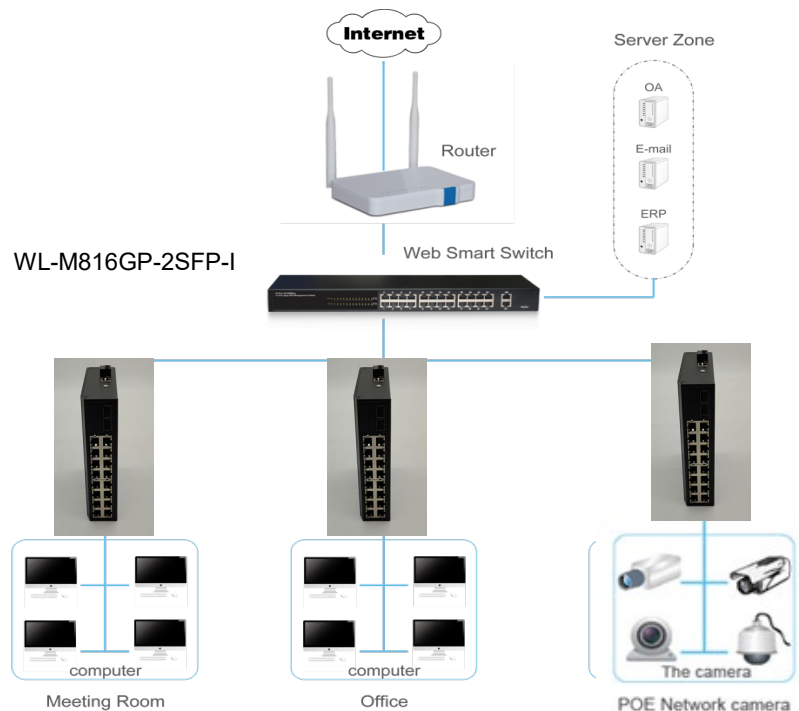
## Description

The WL-M816GP-2SFP-I is a full Gigabit managed industrial PoE switch independently developed by WZ-LAN. it has 16\*10/100/1000M PoE ports and 2\*100/1000 SFP fiber slot ports , port 1-16 can support IEEE 802.3af/at standard PoE power supply, single port PoE power up to 30W.

As a PoE power supply device, it can automatically detect and identify the electrical equipment that meets the standard and supply power through the cable. It can supply the PoE terminal equipment, such as wireless AP, network camera, network telephone, industrial sensor and so on, to meet the demand for high density PoE power supply network environment.

It is suitable for intelligent transportation, rail transportation, electric power industry, mining, metallurgy and green energy construction and so on.

## The application of topology



## Features

- Supports IEEE 802.3i · IEEE 802.3u · IEEE802.3ab · IEEE802.3z · IEEE802.3x · IEEE802.3at · IEEE802.3af · IEEE802.3az.
- Supports PoE power up to 30W for each PoE port.
- 8× gigabit PoE+ ports and 2× gigabit SFP.
- Supports MAC address auto-learning and auto-aging.
- Store and forward mode operates.
- LED indicators for monitoring power, link/activity
- Support QoS, port mirroring, link aggregation protocol.

## Hardware Specification

Model	WL-M816GP-2SFP-I
Chipset	RTL8382MI+RTL8218BI+TPS23861*4
Standards	IEEE 802.3i · IEEE 802.3u · IEEE802.3ab · IEEE802.3x · IEEE802.3az, IEEE802.3af · IEEE802.3at
Number of Ports	16 x 10/100/1000Mbps ports 2 x 1000Mbps SFP ports 1x Console port
Network Media (Cable)	10Base-T: UTP category 3, 4, 5 cable (maximum 100m) 100Base-Tx: UTP category 5, 5e cable (maximum 100m) 1000Base-T: UTP category 5e, 6 cable (maximum 100m) 1000Base-X:MMF,SMF
Transfer Method	Store-and-Forward
MAC Address Table	8K
Switching Capacity	56Gbps
Packet Forwarding Rate	41.67Mpps
Packet Buffer	4.1Mbit
Jumbo Frame	12KBytes
PoE Ports(RJ45)	16x PoE ports compliant with 802.3at/af
Power Pin Assignment	1/2(+),3/6(-)

Indicators	Per Device	Power, System
	Per Port	Link/Activity,
Power Supply		48-56V DC
Power Consumption		Maximum(PoE on): 240W
Dimensions (W×D×H)		185x145x45mm (Rail type Aluminum case)
Environment		Operating Temperature: -40°C~85°C Storage Temperature: -40°C~85°C Operating Humidity: 10%~90% non-condensing Storage humidity: 5%~90% non-condensing

## Software Specification

L2 Features		Support
MAC Address Table		8K
Jumbo Frame		10K (10000)
Flow Control	802.3x (Full-duplex)	Yes
	Back-Pressure (Half-duplex)	Yes
Spanning Tree	IEEE 802.1D (STP)	Yes
	IEEE 802.1w (RSTP)	Yes
	IEEE 802.1s (MSTP)	16 instances
	Auto Edge Port	Yes
	BPDU Filtering	Yes
	ERPS V1.0	Yes
	Self Loop Detection	Yes
Link Aggregation	IEEE 802.3ad LACP	Yes
	Static Trunk	Yes
	Max. Group	8
	Max. Ports/Group	8
	Traffic Load Balancing	Yes

L3 Features		
Static Routing		Yes (IPv4/IPv6)
Address Resolution Protocol (ARP)	Static ARP	Yes
VLAN		
VLAN	Static VLAN	256
	Port-based	Yes
	IEEE 802.1Q Tagged-based	Yes
	Protocol-based	8 groups
	MAC-based	256
Voice VLAN	OUI Mode (Auto/Manual)	16 OUI
Surveillance VLAN	OUI Mode (Auto/Manual)	16 OUI
QinQ (IEEE 802.1ad)	Basic	Yes
GARP VLAN Registration Protocol (GVRP)		Yes
Multicast		
Common	Multicast Groups	256
	Immediate Leave	Yes
	Static/Forbidden Router Port	Yes
	Static/Forbidden Forward Port	Yes
	Filtering	128 profiles
	Throttling	Yes
IGMP Snooping	IGMP v1/v2	Yes
	IGMP v3 Basic (BISS)	Yes
	IGMP v2/v3 Querier	Yes
MLD Snooping	MLD v1/v2	Yes
Multicast VLAN Registration (MVR)		Yes (IPv4)
QoS Features		
Priority Queue		8 queues/port
Queue Scheduling	WRR	Yes
	WFQ	Yes
	Strict Priority	Yes
	Hybrid(WRR+SP or WFQ+SP)	Yes
Class of Service	Port-based	Yes
	802.1p	Yes
	IP TOS Precedence	Yes
	IP DSCP	Yes
Trusted QoS		Yes
Rate Limit	Port-based (Ingress/Egress)	Yes

Access Control List (ACL)		
Access Rules		1024
ACL Type	L2/L3/L4	Yes
	MAC-based	512
	IPv4-based	
	IPv6-based	
PoE Function	Power	Yes
	Current	Yes
	Voltage	Yes
	PoE Watch Dog	Yes
Security		
AAA	Authentication	Yes
TACACS+		8
RADIUS		8
Authentication Manager	IEEE 802.1X	Yes
	MAC Auth	Yes
	Web Auth	Yes
	Guest VLAN	Yes
	Port-based	Yes
	Host-based	Yes
Account Manager	Local Authenticatoin	Yes
	Multiple User Account	8
	Multi-Level Security (Manager/Operator)	Yes
	Password Recovery Procedures	Yes
Management Access	Management VLAN	Yes
	Management ACL	256
SSL	SSLv2	Yes
	SSLv3	Yes
	TLSv1	Yes
WebUI	HTTPS	Yes
CLI	SSH v1/v2	Yes
Port Security	Dynamic Lock	256
Storm Control	Broadcast	Yes
	Unknown Multicast	Yes
	Unknown Unicast	Yes
Spanning Tree	BPDU Guard	Yes
Protected Port (Port Isolation)		Yes
Black Hole MAC		Yes
CPU Defence Engine		Yes
DoS Prevention		Yes
DHCP Snooping (with Option 82)		Yes
Dynamic ARP Inspection		Yes
IP Source Guard		256
IP/MAC/Port Binding (IMPB)		Yes

IPv6		
IPv6 Host	Auto Configuration	Yes
	Static IPv6 Address and Prefix Length	Yes
	Static IPv6 Default Gateway	Yes
	IPv6 Neighbor Discovery (ND)	Yes
	IPv6 Duplicate Address Detection	Yes
	ICMPv6	Yes
IPv6 Application	HTTP/HTTPS	Yes
	TELNET	Yes
	SSH	Yes
	SNMP	Yes
	TFTP	Yes
	Syslog	Yes
	PING	Yes
	DHCPv6	Yes
Management		
CLI	Console	Yes
	Telnet	
WebUI	HTTP	Yes
SNMP	v1	Yes
	v2c	Yes
	v3	Yes
File Management	Firmware Upgrade/Backup	Yes
	Dual Images	Yes
	Configuration Download/Backup	Yes
	Multiple Configurations	Yes
Upload/Download	TFTP (RFC783)	Yes
	HTTP	Yes
	UART	Yes
Time Management	Local	Yes
	SNTP	Yes
Port Management	Friendly Port Name (Port Description)	Yes
	Error Disabled Recovery	Yes
Line Management	Console	Yes
	Telnet (RFC854)	Yes
	SSH v1/v2	Yes
DHCP	Client	Yes
DNS	Client	Yes
Software Reset Button		Yes
EEE (802.3az)		Yes
RMON Management		32 entries / type

