

# MLS-104G-S

## Gigabit, 4-port IEEE802.3af/at + 1 Combo(UTP+Fiber) PoE Fiber Switch

### Description

MLS-104G-S is an Gigabit Industrial 802.3af/at PoE+ Fiber Switch, providing Power over Ethernet capability and non-blocking wire-speed Fast Ethernet performance in harsh industrial environment. It provides 4 port 10/100/1000Base-T copper with 802.3af/at PoE injector and also provide one Combo Port (UTP/SFP) for uplink to data-center. The MLS-104G-S design for Industrial like function like redundant power input, Watch Dog Function built in for fault detection, also can using fiber Mini-GBIC for Fiber link without Media convert design.

The MLS-104G-S is well suited for applications in deploying surveillance system, and security control and wireless service in climatically demanding environments with wide temperature range from -20 to 70 degrees C.

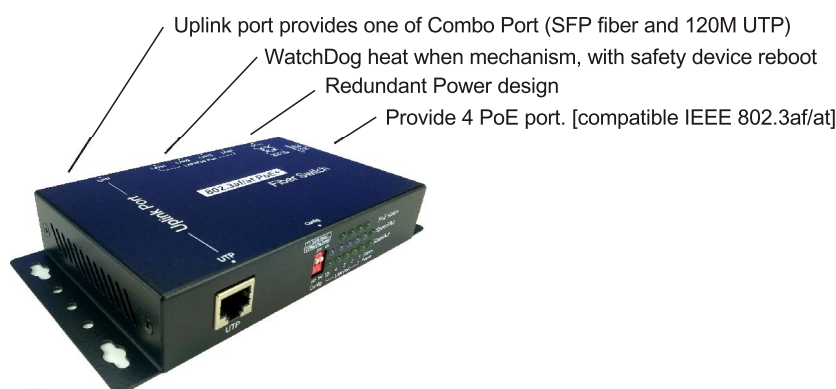
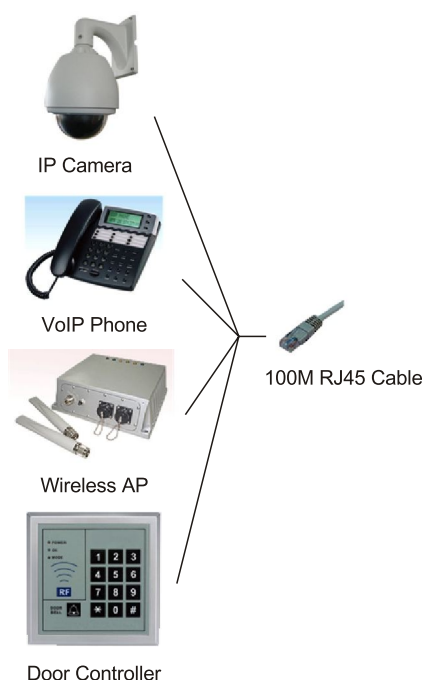
### High Power PoE for Security and Public Service Applications

To fulfill the demand of High Power PoE for network applications with Megabit speed transmission under wide temperature, the MLS-104G-S provides 4 10/100/1000Mbps ports featuring both IEEE 802.3af and IEEE 802.3at Power over Ethernet Plus (PoE+) that combine up to 30 watts of power output and data per port over one Cat.5E / 6 Ethernet cable.

With totally 60-watt(option pack can be upgrade to 120-watt), PoE budget on the whole system the MLS-104G-S is designed specifically to satisfy the growing demand of higher power consuming network PD (powered devices) such as PTZ (Pan, Tilt & Zoom) / Speed Dome network cameras, multi-channel (802.11a / b / g / n) outdoor wireless LAN access points and other PoE network devices by providing double PoE power, rather than the current conventional 802.3af PoE.

### Features

- ◆ TP port Support MDI/MDIX auto-crossover function.
- ◆ TP port Support 10/100/1000Base-T Auto-negotiation.
- ◆ Support Max packet size 9k byte Jumbo Frame.
- ◆ Provide 4 PoE ports can transfer data via a single cable and power, also compatible IEEE802.3af/at each Port.
- ◆ Support Power fading protect like OVP and OCP.
- ◆ Uplink port provides one set of Combo Port (SFP fiber and UTP) two kinds of interfaces to meet the 100M Cat5e/Cat6 cable or fiber connection capacity without Media convert.
- ◆ Design DIP switch setting for WatchDog Function Enable.[Auto Restart],
- ◆ Design for redundant power input, also can upgrade totally PoE budget to 120 Watt.
- ◆ DIN-Rail(option) or wall mounting ability.



### Feature

- ◆ Provide 4 PoE(IEEE802.3af/at) ports can transfer data via a single cable and power.
- ◆ Support Power fading protect like OVP and OCP.
- ◆ Uplink port provides one set of Combo Port (SFP fiber and UTP) two kinds of interfaces to meet the 120M Cat5e/Cat6 cable or fiber connection capacity without Media convert.
- ◆ Design DIP switch setting for Watch Dog Enable/Disable
- ◆ Design for redundant power input, also can upgrade totally PoE budget to 120 Watt.

Product Model	4-port IEEE802.3af/at + 1Combo(UTP+Fiber) PoE Fiber Switch
Technical Specifications	
Hardware	
Connectors	4x 10/100/1000 Base-T RJ45 TP (PSE Port) (Uplink Port) Fast Ethernet : 1x10/100/1000 Base-T RJ45 TP (Uplink Port) Fiber : 1x SFP Socket 4 PIN DC IN (PWR 1) 2 PIN DC IN (PWR 2) Terminal Block
Indicators	Power LED Status LED LAN1~Up Link/Act LED LAN1~Up Speed/Act LED LAN1~4 PoE ON/OFF LED
DIP Switch Functionality :	1 : Uplink Interface setting (ON->Fiber, OFF->UTP) 2 : Watch Dog Function ON/OFF
Power Protection : (Surge)	IEC 61000-4-2 level 4 (ESD) , 15 kV (air discharge), 8kV (contact discharge) IEC-61000-4-5 MIL STD 883G, method 3015-7 Class 3B, -25kV HBM(human body model)
Installation	DIN Rail Kit(option) and Wall Mount ear
Dimension	173mm(W) x 90mm(D) x 28mm(H)
Weight	450 g
Power Requirement	External Power Supply : 48V~56V/72W (Could be choice 130W) System Power Consumption : < 4 Watts PoE Power Budget: 68.6W (Could be choice 130W to upgrade PoE budget to 126.6W)

Power over Ethernet	
PoE Standard	IEEE 802.3af/ IEEE 802.3at Power over Ethernet Endspan
Power Pin Assignment	3/6(+), 1/2(-)
PoE Power Output	Per port 48~56V,DC 350mA Max. 15.4 watts(IEEE 802.3af) Per port 48~56V,DC 600mA Max. 30 watts(IEEE 802.3at)
Max. number of Class 4 PD	4

Switch Specification	
Network Standards	IEEE802.3 10BASE-T, 10Mbit/s IEEE802.3u 100BASE-TX, 100Mbit/s, Auto-negotiation IEEE802.3ab 1000Base-TX IEEE802.3z 1000Base-X IEEE802.3x Full Duplex and Flow Control IEEE802.3af Power over Ethernet IEEE802.3at High Power over Ethernet MDI/MDI-X Auto Crossover
Switch Processing Scheme	Store and Forward
Address Table	Support 2K MAC address entries
Flow Control	Back pressure for half duplex IEEE 802.3x Pause Frame for full duplex Non-blocking & Non-head-of-line blocking full-wire speed forwarding
Switch fabric	10 Gbps
Maximum Transmit Unit	9K byte
Emissions Compliance	FCC part 15 Class B, CE Mark
Environmental Conditions	Operating Temperature : -20°C ~ 70°C (-4°F ~ 158°F) Storage Temperature : -20°C ~ 70°C (-4°F ~ 158°F) Operating Humidity : 10% ~ 90%, Non-condensing. 20-80% (Storage)

Ordering Information	
MLS-104G-S-130W	130W, Steel Case, 4-port IEEE802.3af/at + 1Combo(UTP+Fiber) PoE Fiber Switch (Operating Temperature : -20°C ~ 70°C)
MLS-104G-S-72W	72W, Steel Case, 4-port IEEE802.3af/at + 1Combo(UTP+Fiber) PoE Fiber Switch (Operating Temperature : -20°C ~ 70°C)
1.25G-SFP-MM-C	1.25G, MM 850nm, 550M, 0~70 °C, Dual LC
1.25G-SFP-SM-C	1.25G, SM 1310nm, 10Km, 0~70 °C, Dual LC
DIN RAIL Mount KIT	DIN RAIL Mount option KIT
PoE 72W Adapter Kit	PoE 72W Adapter Kit
PoE 130W Adapter Kit	PoE 130W Adapter Kit

## Contact Information

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