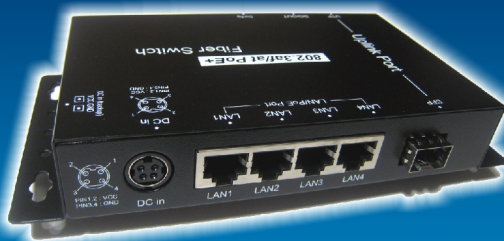# MLS-1O4F-P

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

Description

MLS-1O4F-P is an Industrial 802.3at/af PoE+ Fiber Switch, providing Power over Ethernet capability and non-blocking wire-speed Fast Ethernet performance in harsh industrial environment. It provides 4 port 10/100Base-T copper with 802.3af/at PoE injector and also provide one Combo Port (UTP/SFP) for uplink to data-center. The MLS-1O4F-P design for Industrial like function like redundant power input, Uplink fault detection for NO output, also can using fiber-GBIC for Fiber link without Media convert design.
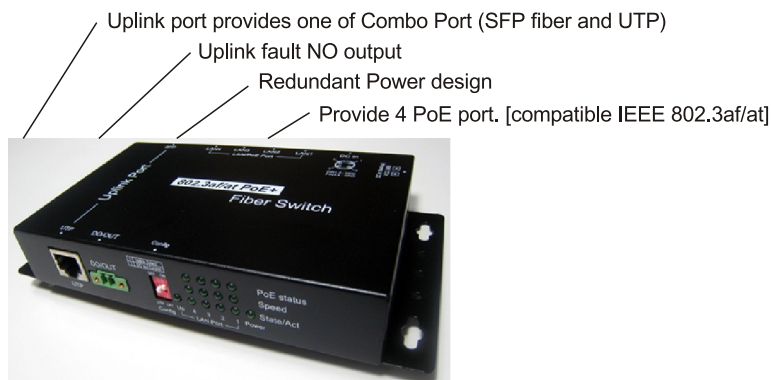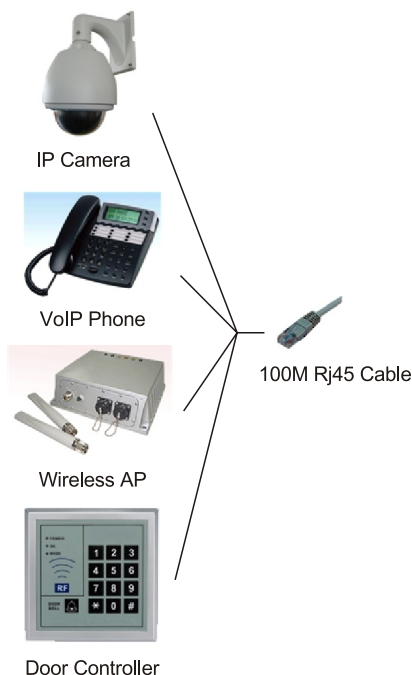The MLS-1O4F-P is well suited for applications in deploying surveillance system, and security control and wireless service in climatically demanding environments with wide temperature range from -10 to 60 degrees C.

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-1O4F-P provides 4 10/100Mbps 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 PoE budget on the whole system, the MLS-1O4F-P 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 10/100Base-T Auto-negotiation.
◆ Support Max packet size 1552 byte.
◆ 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 Uplink fault detection output.[Fault Close/ Normal Open],
◆ Design for redundant power input, also can upgrade totally PoE budget to 120 Watt.

IP Camera

VoIP Phone

Wireless AP

Door Controller

100M Rj45 Cable

Uplink port provides one of Combo Port (SFP fiber and UTP)
Uplink fault NO output
Redundant Power design
Provide 4 PoE port. [compatible IEEE 802.3af/at]

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 100M Cat5e/Cat6 cable or fiber connection capacity without Media convert.
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Product Model	4-port IEEE802.3af/at + 1Combo(UTP+Fiber) PoE Fiber Switch

Technical Specifications

Hardware

Connecotrs	4x 10/100 Base-T RJ45 TP (PSE Port) (Uplink Port) Fast Ethernet : 1x10/100 Base-T RJ45 TP (Uplink Port) Fiber : 1x SFP Socket 4 PIN DC IN (PWR 1) 2 PIN DC IN (PWR 2) Terminal Block 2 PIN (NC) OUT Terminal Block
Indicators	Power LED LAN1~4 State/Act LED LAN1~4 Speed LED LAN1~4 PoE ON/OFF LED Uplink State//Act LED (for UTP/Fiber Uplink Status)
DIP Switch Functionality :	1 : Uplink Interface setting (ON->Fiber, OFF->UTP) 2 : Uplink NC signal output 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 and Wall Mount ear
Dimension	173mm(W) x 90mm(D) x 28mm(H)
Weight	450 g
Power Requirement	System Power Consumption : <4 Watts External Power Supply : 48V~56V/65W PoE Power Budget : 60W (can add 2'nd Power Adapter to extend)

Power over Ethernet

PoE Standard :	IEEE 802.3af/ IEEE 802.3at Power over Ethernet Midspan
Power Pin Assignment	4/5(+), 7/8(-)
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/100BASE-FX, 100Mbit/s, Auto-negotiation 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
Switch fabric	1Gbps
Maximum Transmit Unit	1552 byte
Emissions Compliance	FCC part 15 Class B, CE Mark
Environmental Conditions	Operating Temperature : -20℃ ~ 70℃ (4℉ ~ 158℉) Storage Temperature : -10℃ ~ 65℃ (14℉ ~ 149℉) Operating/Storage Humidity : 10% ~ 90%, Non-condensing

Ordering Information

MLS-1O4F-P	Steel Case, 4-port IEEE802.3af/at + 1Combo(UTP+Fiber) PoE Fiber Switch
155-SFP-MM-C	155M, MM 850nm, 2Km, 0~70 ℃, Dual LC
155-SFP-SM-C	155M, SM 1310nm, 20Km, 0~70 ℃, Dual LC
DIN TAIL Mount KIT	DIN RAIL Mount option KIT
48V 65W Adapter Kit	48V 65W Adapter Kit
56V 65W Adapter Kit	56V 65W Adapter Kit

Contact Information
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