## TELECOM/DATACOM SYSTEM

## 10/100/1000M Base-TX to 1000Base-FX (optional SFP) PoE(PSE) Media Converter

The LS1000-aaa-b-c is an unmanaged PoE switch that supports $10 / 100 / 1000 \mathrm{M}$ and provides both data and power through a single network cable. It also functions as an Ethernet power source, identifying connected devices such as IP cameras that comply with the IEEE 802.3af and 802.3at standards to supply power to them. Deploying wireless APs, IP cameras, and other network-based equipment is made effortless with this switch.


## FEATURES

- Comply to IEEE 802.3,IEEE 802.3u,IEEE 802.3af,IEEE 802.3at
- 10/100/1000M self-adaptive,down link ports support PoE
- All the ports support Auto MDI/MDIX
- Each PoE port support power up to 15.4W (IEEE 802.3af) 25.5W (IEEE 802.3at)
- Comply to Power Device (PD) applied to IEEE 802.3af / at
- Support IEEE802.3x Full duplex flow control and duplex backpressure flow control function
- Automatic MAC address learning and aging
- 1K MAC address
- 1.6G Broadband and 96Kb forwarding memory
- High performance full load power configuration
- LED indicator monitor working status and help fault detection


## SPECIFICATIONS

| Data Rates |  |
| :---: | :---: |
| Type | Dual fiber / single fiber |
| Network Ports | 10/100/1000Mbps RJ45 port AUTO Negotiation/AUTO MDI/MDIX |
|  | 1000Mbps SC fiber connector |
| PoE Distance | 100m |
| Transmission Method | Store-And-Forward |
| Network Media | 10BASE-T: UTP category 3, 4, 5 cable (maximum 100m) |
|  | 100BASE-TX: UTP category 3, 4, 5 cable (maximum 100m) |
|  | 1000BASE-TX: UTP category 5 cable or above(maximum 100m) |
|  | Single mode 20 Km or Multi mode 2 Km |
| Performance Specifications | Bandwidth: 1.6 Gbps |
|  | Network latency: $<4 \mu$ s for 64-byte frames in store-and |
|  | forward mode for 1000 Mbps to 1000 Mbps transmission |
|  | Buffer memory: 512KBytes per system |
|  | Address database size: 4,000 media access control (MAC) ad ; |
|  | Addressing: 48-bit MAC address ; Acoustic noise: <38 dBA ; |
|  | Mean time between failures (MTBF): 458,124 hours at 25C ; |
| Network Protocol and Standards | IEEE 802.3 10BASE-T ; IEEE 802.3u 100BASE-TX ; IEEE 802.3ab 1000BASE-T ; |
|  | IEEE 802.3z 1000BASE-X ; IEEE 802.3x full-duplex flow control ; |
|  | IEEE 802.3af (Power over Ethernet Plus) |
| Power Supply | 48~52VDC; plug is localized to country of sale |
| Environmental Specifications | Operating temperature: $-10^{\circ} \mathrm{C}$ to $75^{\circ} \mathrm{C}$; Storage temperature: $-20^{\circ} \mathrm{C}$ to $85^{\circ} \mathrm{C}$; |
|  | Operating humidity: 10\% 90\% maximum relative humidity, RH non-condensing ; |
|  | Storage humidity: 5\% 90\% maximum relative humidity, RH non-condensing |
| Diameter | 94L x 70W $\times 26 \mathrm{Hmm}$ |

## TELECOM/DATACOM SYSTEM

LED INDICATOR DESCRIPTION

| LED Indicator Name | Status | Description |
| :--- | :--- | :--- |
| Power indicator : PWR | ON | Power is on and the device is working |
|  | OFF | Power is off |
| PoE indicator : PoE | ON | Connected PD device,working properly |
|  | Blink | Short circuit or current overload |
|  | OFF | No connected PD device or No power supply |
| Fiber indicator : FX | ON | Fiber link were connected properly |
|  | Blink | Fiber port work properly |
|  | OFF | Con connected or fiber link broken down |
| Link indicator : L/A | ON | Data transmission properly |
|  | OFF | Not connected to device or TP link broken down |

NOTE: please confirm that the PD devices are complying with IEEE 802.3af / at standard.
Priority : this function will protect device when it is overload, if all PD consumption are higher than specified , switch port will be sorted by priority, port 1, port 2 ...... port N then power supply of lowest priority will be off.
Power adaptor: please use 48-52VDC power supply to input to the switch, the switch will be damaged if use mismatched power supply (For internal power supply type switch, please input AC110-245V/50Hz) POE port: Each RJ5 port include PoE function, it can transmit power and data when connected matching device, you can estimate the working status of each port on front panel LEDS

## FUNCTIONAL DIAGRAM

## POE

$10 / 100 / 1000 \mathrm{M} \times 1$
$1000 \mathrm{M} \times 1$

## ORDERING INFORMATION

| PN | DESCRIPTION |
| :---: | :---: |
| LS1000-aaa-b-c | 10/100/1000M Base-TX to 1000Base-FX (optional SFP) PoE(PSE) Media Converter |
| aaa |  |
| SFP Slot |  |
| SFP | SFP slot |
| Duplex Fiber, SC Connector |  |
| D02 | 10/100/1000 Mb/s Multimode 1310nm, 2km, Duplex SC |
| D20 | 10/100/1000 Mb/s Singlemode 1310nm, 20km, Duplex SC |
| D40 | 10/100/1000 Mb/s Singlemode 1310nm, 40km, Duplex SC |
| D60 | 10/100/1000 Mb/s Singlemode 1310nm, 60km, Duplex SC |
| D80 | 10/100/1000 Mb/s Singlemode DFB 1550nm, 80km, Duplex |
| Single Fiber, SC Connector |  |
| S2035 | 10/100/1000 Mb/s Singlemode 1310/1550nm, 20km, Simplex SC |
| S2053 | 10/100/1000 Mb/s Singlemode 1550/1310nm, 20km, Simplex SC |
| S4035 | 10/100/1000 Mb/s Singlemode 1310/1550nm, 40km, Simplex SC |
| S4053 | 10/100/1000 Mb/s Singlemode 1550/1310nm, 40km, Simplex SC |
| S6035 | 10/100/1000 Mb/s Singlemode 1310/1550nm DFB, 60km, Simplex SC |
| S6053 | 10/100/1000 Mb/s Singlemode 1550/1310nm DFB, 60km, Simplex SC |
| b |  |
| S | Standalone External Power Supply |
| R | Rackmount CardRackmount Card |
| c |  |
| 1 | IEEE 802.3 af/ Output Voltage 48V / Output Current 0.35A Max / Output Power 15.4W Max |
| 2 | IEEE 802.3 at/ Output Voltage 48V / Output Current 0.54A Max / Output Power 25W Max |

