SI-IES-5x1D-LRT Series

Media Converters

Unmanaged Hardened PoE++ Injector/Converters

(1) 1G/10GBase-X SFP+ Slot + (1 or 2) 10M/100M/1G/2.5GBase-T(X) PoE++ Ports

The SI-IES-511D-LRT and SI-IES-521D-LRT are unmanaged hardened multi-Gigabit PoE++ injector/converters that add up to 90 Watts of power from the PoE++ port(s) onto 1 or 2 (depending on model) network segments. The SI-IES-5x1D Series are designed specifically to meet the evolving demands of higher 2.5G bandwidth and higher power (90W) devices such as wireless access points and security cameras in outdoor traffic cabinets, parking garages, or other harsh environments. The 1G/10G speed SFP+ slot provides flexibility by allowing fiber SFP uplink ports to extend the distance of security, transportation and telco networks. The SI-IES-5x1D-LRT Series PoE++ injector/converters are built for rugged environments like outdoor cabinets and certified to ensure safe and reliable operation in temperatures between -40°C and +75°C.



SI-IES-511D-LRT SI-IES-521D-LRT

Key Features

- Supports IEEE 802.3af/at/bt
- Multi-Gig 10M/100M/1G/2.5G data transmission
- SFP slot supports 1G/10G SFP+
- Non-blocking architecture
- Remote PD Reset
- Link fault pass through
- Full/half-duplex flow control
- Auto-MDI/MDIX
- Auto-Negotiation
- Store-and-forward architecture
- Reverse Polarity Protection
- Overload Current Protection
- 10K byte jumbo frames
- Redundant power input
- Compact, space-saving size
- IP31 housing
- Extended operating temperature (-40°C to +75°C)
- DIN Rail mount / optional wall mount brackets included

Specifications

Standards	IEEE 802.3 10Base-T Ethernet IEEE 802.3u 100Base-TX Fast Ethernet IEEE 802.3ab 1000Base-T Gigabit Ethernet IEEE 802.3bz 2.5GBase-T/5GBase-T Ethernet IEEE 802.3z 1000Base-X Gigabit Ethernet IEEE 802.3ae 10Gbps Ethernet IEEE 802.3x Flow Control and Back Pressure IEEE 802.3af PoE IEEE 802.3at PoE+ IEEE 802.3bt PoE++
Connectors	(1) DATA IN 1G/10GBase-X SFP+ Slot (1 or 2) DATA OUT PoE++ RJ-45 10M/100M/1000M/2.5GBase-T(X) Ethernet Port with 90W PoE Output Power
Protocol	CSMA/CD
Status LEDs	Power: PW1 (Green): ON=power detected PW2 (Green): ON=power detected Copper Port(s) 1 or 2 (depending on model) TX/RJ-45 Port (Green): ON=TX port is detected FLASHING: TX data is transmitting/receiving PoE ports (1;2) (Amber): ON=PD is detected on designated port SFP Port LNK (LNK/ACT) (Green): ON=FX port is detected FLASHING: FX data is transmitting/receiving
DIP Switch	DIP 1: Remote PD Reset (Enabled/Disabled) DIP 2: Link Pass-through
PoE Pin Assignment	Pin 1(V-), 2 (V-), 3 (V+), 6 (V+) Pin 4 (V+), 5 (V+), 7 (V-), 8 (V-)
PoE Power	SI-IES-511D-LRT 90W per port; total PoE budget 90W SI-IES-521D-LRT 90W per port; total PoE budget 180W
Power Input	54-56VDC; 4-pin terminal block
Power Consumption	SI-IES-511D-LRT Full Load: 107W No Load/No SFP: 7W SI-IES-521D-LRT Full Load: 107W No Load/No SFP: 7W
Ingress Protection	IP31
Surge Protection	2kV Surge Immunity
Dimensions	Width: 38.6 mm (1.52 in.) Depth: 81.5 mm (3.209 in.) Height: 104.5 mm (4.114 in.) (without terminal block); 114.1 mm (4.492 in.) (with terminal block)
Environment	Operating -40°C to +75°C Storage -40°C to +85°C Humidity 5% to 95% (non-condensing)
Weight	0.32 kg (0.7 lbs)
MTBF	526,264 hrs Telcordia (Bellcore), GB at 50°C
Certifications	EN62368-1 (LVD) Safety UL62368-1 (MET) Hazardous Loc UL 121201 C1 D2 (MET) (Pending) FCC, CE/UKCA, EN 55032/35 (EMC) EMI CISPR 32, FCC Part 15B Class B IEC61000-4-2 (ESD): Contact 6KV, Air 8KV IEC61000-4-3 (RS) IEC61000-4-4(EFT): Power 2KV, Signal 2KV IEC61000-4-5 (Surge): Power 2KV, Signal 2KV IEC61000-4-6 (CS) IEC61000-4-8 (Magnetic Field) EN60068-2-6 (Vibration) EN60068-2-27 (Shock) EN60068-2-32 (Free Fall)
Warranty	5 years

Ordering Information

SI-IES-511D-LRT
(1) 1G/10GBase-X SFP+ slot +
(1) 10M/100M/1G/2.5GBase-T(X) PoE++ Port

SI-IES-521D-LRT
(1) 1G/10GBase-X SFP+ slot +
(2) 10M/100M/1G/2.5GBase-T(X) PoE++ Ports

Industrial Power Supplies (sold separately)

25105 (for SI-IES-511D-LRT only)
Input 88-264VAC, 124-370VDC
Output 48-55VDC, 2.5A, 120W

25104 (for SI-IES-521D-LRT)
Input 85-264VAC, 124-370VDC
Output 48-55VDC, 5.0A, 240W

PS-DC-DUAL-5624T
Input 100-240VAC
Output 56V, 5.7A, 315W

Optional Accessories (sold separately)

SFP Modules

OCA-P181610
18x16x10 in. Polycarbonate Enclosure

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Learn more at lantronix.com/si-ies-5x1d-lrt