

EL9020/EL9100 Series

Hardened 10/100/1000BASE-TX to 1000BASE-SX/LX/BX Media Converter



UL508



Extended Temperature

Value

- Specific design for industrial communication applications with UL508 safety certification
- Harsh environment design and supports auto 10/100/1000BASE-T Ethernet transmission
- DIP switch design for Link-Fault-Pass-Through, fiber auto/force mode, link down alarm configuration

Features

- Complies with NEMA TS1 & TS2 Environmental requirements for Traffic control equipment
- Complies with IEC61000-6-2 EMC Generic standard immunity for Industrial environment
- DIP switch configuration for "Link-Fault-Pass-Through", fiber auto/force mode, link down alarm
- 10/100/1000Mbps-Full-duplex, Auto-Negotiation, Auto-MDI/MDIX
- Full wire-speed forwarding rate
- Alarms for power and port link failure by relay output
- Redundant power inputs with Terminal Block and DC Jack
- -40°C to +75°C (-40°F to 167°F) operating temperature range
- Hardened aluminum case
- Supports DIN-Rail, Panel or Rack Mounting installation

Ordering Information

EL9100-X1B	10/100/1000BASE-TX to 1000BASE-SX/LX/BX Hardened Media Converter
EL9020-00B	10/100/1000BASE-TX to Gigabit SFP Hardened Media Converter

SFP Hardened Type Gigabit Fiber Transceiver: (Optional)

Part Number	Typical Distance	Wavelength (nm)	Cable Type	Connector
EX-1250NSP-SB1L-A	275M/550M	850	MM	Duplex LC
EX-1250TSP-MB4L-A	10KM	1310	SM	Duplex LC
EX-1250TSP-NB6L-A	40KM	1310	SM	Duplex LC
EX-1250TSP-KB8L-A	70KM	550	SM	Duplex LC
EX-1250TBP-MB1L-A	550M	TX:1310 / RX:1550	MM	WDM-A LC
EX-1250TBP-LB1L-A	550M	TX:1550 / RX:1310	MM	WDM-B LC
EX-1250TBP-MB4L-A	10KM	TX:1310 / RX:1550	SM	WDM-A LC
EX-1250TBP-KB4L-A	10KM	TX:1550 / RX:1310	SM	WDM-B LC
EX-1250TBP-MB5L-A	20KM	TX:1310 / RX:1550	SM	WDM-A LC
EX-1250TBP-KB5L-A	20KM	TX:1550 / RX:1310	SM	WDM-B LC

*More Gigabit options available upon request

Gigabit Options :

- (X) = 3 : 1000BASE-SX (SC) - 550m
 4 : 1000BASE-SX (SC) - 2Km (1310nm)
 5 : 1000BASE-SX (ST) - 550m
 A : 1000BASE-LX (SC) - 10Km
 B : 1000BASE-LX (SC) - 20Km
 H : 1000BASE-LX (ST) - 10Km
 I : 1000BASE-LX (ST) - 20Km
 R : 1000BASE-BX (SC) WDM - TX:1310nm/RX:1550nm - 20Km
 S : 1000BASE-BX (SC) WDM - TX:1550nm/RX:1310nm - 20Km

Power Supply : (Optional)

*Option A - The Terminal Block type external power supplies are not included. Please order the following part numbers:

DR-30-24, DR-60-24, DR-75-24, DR-120-24 or 41-136046-X

(X)=1: US, 2: EU, 3: UK, 4: AU, 5: JP

**Option B - The external power adapter and power cord are not included. Please order the following part numbers:

41-136044-X

(X)=1: US, 2: EU, 3: UK, 4: AU, 5: JP

Installation Type : DIN-Rail (mounting kit is included)

Optional Panel mount kit, part number: KP-AA96-480

Specifications

Technology	
Standards	IEEE802.3 10BASE-T, IEEE802.3u 100BASE-TX, IEEE802.3ab 1000BASE-T, IEEE802.3z 1000BASE-SX/1000BASE-LX, IEEE802.3x
Forward and Filtering Rate	1,488,100pps
Power	
Input	Voltage: 12 to 48VDC (Terminal Block); 12VDC (DC Jack)
Power Consumption	7.68W Max, 0.16A @ 48VDC
Overload Current Protection	Present
Reverse Polarity Protection	Present
Mechanical	
Casing	Aluminum case IP30
Dimensions	50mm (W) x 110mm (D) x 135mm (H) (1.97" (W) x 4.33" (D) x 5.31" (H))
Weight	0.8Kg (1.76lbs.)
Installation	DIN-Rail (Top hat type 35mm), Panel, Rack Mounting
Interface	
Ethernet Port	10/100/1000BASE-TX: 1 port 1000BASE-SX/LX/BX: 1 port
LED Indicators	Per Unit: Power Status (Power1, Power2, Power3, Fault), LFPT Per Port: 10/100/1000TX: Link/Activity, Speed, Full-duplex/Collision 1000SX/LX/BX: Link/Activity
Relay Contact	Relay contact rating with current 1A @ 30VDC, 0.5A @ 120VAC
Environment	
Operating Temperature	-40°C to +75°C (-40°F to 167°F)
Storage Temperature	Tested @ -40°C to +85°C (-40°F to 185°F)
Ambient Relative Humidity	5% to 95% (non-condensing)

Regulatory Approvals

ISO	Manufactured in an ISO9001 facility
Safety	UL508
EMI	*FCC Part 15, Class A *EN61000-6-4 - EN55022 - EN61000-3-2 - EN61000-3-3
EMS	*EN61000-6-2 - EN61000-4-2 (ESD Standards) Contact: + / - 4KV; Criteria B Air: + / - 8KV; Criteria B - EN61000-4-3 (Radiated RFI Standards) 10V/m, 80 to 2.7GHz; 80% AM Criteria A - EN61000-4-4 (Burst Standards) Signal Ports: + / - 4KV; Criteria B D.C. Power Ports: + / - 4KV; Criteria B - EN61000-4-5 (Surge Standards) Signal Ports: + / - 1KV; Line-to-Line; Criteria B D.C. Power Ports: + / - 0.5KV; Line-to-earth; Criteria B - EN61000-4-6 (Induced RFI Standards) Signal Ports: 10Vrms @ 0.15 - 80MHz; 80% AM Criteria A D.C. Power Ports: 10Vrms @ 0.15 - 80MHz; 80% AM Criteria A - EN61000-4-8 (Magnetic Field Standards) 30A/m @ 50, 60Hz; Criteria A
Environmental Test	*IEC60068-2-6 Fc (Vibration Resistance) 5g @ 10 - 150Hz, Amplitude 0.35mm Compliance (Operation/Storage/Transport) *IEC60068-2-27 Ea (Shock) 25g @ 11ms (Half-Sine Shock Pulse; Operation) 50g @ 11ms (Half-Sine Shock Pulse; Storage/Transport) *IEC60068-2-32 Ed (Free Fall) 1M (3.281ft.)

Dimensions

