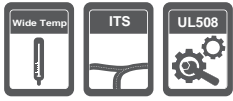


EL9020 Series

Hardened 10/100/1000BASE-TX to Gigabit SFP Media Converter



Value

- › SFP socket flexible for Gigabit fiber optic expansion
- › Harsh environment design and supports auto 10/100/1000BASE-T Ethernet transmission
- › Specific design for industrial communication applications with UL508 safety certification

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
- › 1000Mbps-Full-duplex, Auto-Negotiation, Auto-MDI/MDIX
- › SFP socket offers Gigabit fiber optic selection flexibility
- › Full wire-speed forwarding rate
- › Alarms for power and port link failure by relay output
- › Redundant power inputs with Terminal Block and DC Jack interfaces
- › -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

EL9020-00B	10/100/1000BASE-TX to Gigabit SFP Hardened Media Converter
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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

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=1,2,3,4,5

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

41-136044-X X=1,2,3,4,5

Installation Type : DIN Rail (mounting kit is included)

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



Specifications

Technology	
Standards	<ul style="list-style-type: none"> • IEEE802.3 10BASE-T, IEEE802.3u 100BASE-TX, IEEE802.3ab1000BASE-T, IEEE802.3z 1000BASE-SX/1000BASE-LX, IEEE802.3x
Forward and Filtering Rate	<ul style="list-style-type: none"> • 1,488,100pps for 1000Mbps

Power	
Voltage	<ul style="list-style-type: none"> • Input: 12 to 48VDC (Terminal Block); 12VDC (DC Jack)
Power Consumption	<ul style="list-style-type: none"> • 7.68W, Max., 0.16A @ 48VDC
Overload Current Protection	<ul style="list-style-type: none"> • Present
Reverse Polarity Protection	<ul style="list-style-type: none"> • Present

Mechanical	
Casing	<ul style="list-style-type: none"> • Aluminum case • IP30
Dimensions	<ul style="list-style-type: none"> • 50mm (W) x 110mm (D) x 135mm (H) (1.97" (W) x 4.33" (D) x 5.31" (H))
Weight	<ul style="list-style-type: none"> • 0.8Kg (1.76lbs.)
Installation	<ul style="list-style-type: none"> • DIN-Rail (Top hat type 35mm), Panel, Rack Mounting

Interface	
Ethernet Port	<ul style="list-style-type: none"> • 10/100/1000BASE-TX: 1 port • Gigabit SFP: 1 port
LED Indicators	<ul style="list-style-type: none"> • Per Unit: Power Status (Power1, Power2, Power3, Fault), LFPT • Per Port: 10/100/1000TX: Link/Activity, Speed, Full-duplex/Collision • Gigabit SFP: Link/Activity
Relay Contact	<ul style="list-style-type: none"> • Relay contact rating with current 1A @ 30VDC, 0.5A @ 120VAC

Environment	
Operating Temperature	<ul style="list-style-type: none"> • -40°C to 75°C (-40°F to 167°F) • Tested @ -40°C to 85°C (-40°F to 185°F)
Storage Temperature	<ul style="list-style-type: none"> • -40°C to 85°C (-40°F to 185°F)
Ambient Relative Humidity	<ul style="list-style-type: none"> • 5% to 95% (non-condensing)

Regulatory Approvals	
ISO	<ul style="list-style-type: none"> • Manufactured in an ISO9001 facility
Safety	<ul style="list-style-type: none"> • UL508
EMI	<ul style="list-style-type: none"> • FCC Part 15, Class A • EN61000-6-3 <ul style="list-style-type: none"> - EN55022 - EN61000-3-2 - EN61000-3-3
EMS	<ul style="list-style-type: none"> • EN61000-6-2 <ul style="list-style-type: none"> - EN61000-4-2 (ESD Standards) Contact: + / - 4KV; Criteria B Air: + / - 8KV; Criteria B - EN61000-4-3 (Radiated RFI Standards) 10V/m, 80 to 2.7GMHz; 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 Compliance	<ul style="list-style-type: none"> • IEC60068-2-6 Fc (Vibration Resistance) 5g @ 10 - 150Hz, Amplitude 0.35mm (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.)

Diagrams

Unit: mm

