Accesseries

05

- Ethernet Adapter Cards
- Industrial Power Suppiles
- Power Adapters
- Hardened SFP Fiber Transceivers
- TransRack

Selection Guide / Accessories



Nic Cards >>			
Model Name	GE3000-TX	GE3000-SX/LX	EN301
Ethernet Interface			
Max. 10/100 BASE-TX	-	-	1
Max. 100 BASE-FX	1	-	-
Max. 1000 BASE-SX/LX	-	1	-
Bus Interface			
PCI Express	√	√	-
PCI	-	-	√
Mode of Operations			
Auto-negotiation, Auto-MDI/MDI-X	√	√	√
Flow Control	√	√	√
Store & Forward	√	√	√
Machanical			
Dimensions (LxW)	125x121	125x121	133x117.5 / 133x80
Management Function			
ACPI*	√	√	√
Wake-on -LAN remote wake-up	√	-	-
IEEE802.1Q VLAN	√	√	√
IEEE802.1P Layer 2 Priority Tagging	√	√	√
NDIS5 Checksum Offload	√	√	√
RFC1157 SNMP v1	√	√	-
Preboot Execution Environment	√	√	-
Cable Diagnostic Utility	√	√	-
Jumbo Frame	√	√	-
Operating Temperature			
0˚C to 45˚C	√	√	√
Driver Supports			
Windows	Windows Vista, Windows 2003, Windows XP, Windows 2000, Windows ME, Windows 98SE		Windows XP, Windows 2000, Windows ME, Windows 98, Windows 95, Windows NT 3.51/4.0, Work Group 3.11
Novell	Netware 4.2 - 4.6	Netware 4.2 - 4.6	Netware 3.11, 3.12, 4.x, 5.x, 6.0 Clinet 32, Netware Client
Unix	Linux 2.4/2.6	Linux 2.4/2.6	RedHat Linux 6.2, 7.0, 7.1 UnixWare 8.0, SCO UNIX 5.0
Others	-	-	LAN Manager, LANtastic, PC-NFC, NCSA Telnet, FreeBSD 3.2, 4.0, 4.11, 4.2
Regulatory Approvals			
CE / FCC	Class B	Class B	Class B
Page No.	231	231	233

* Advanced Configuration & Power Interface

Selection Guide / Accessories






Industrial Power Supplies >>						
Model Name	DD-85-48	DD-85-55	DR-30-24	DR-60-24	DR-75-24	DR-120-24
Output						
DC Voltage	48VDC	55VDC	24VDC	24VDC	24VDC	24VDC
Current Range	0-1.78A	0-1.55A	0-1.5A	0-2.5A	0-3A	0-5A
Rated Power	85W	85W	36W	60W	76.8W	120W
Input						
12 - 36VDC	√	√	-	-	-	-
85 - 264VAC / 120 - 370VDC	-	-	√	√	√	-
88 - 132VAC / 176 - 264VDC	-	-	-	-	-	√
90 - 264VAC	-	-	-	-	-	-
Protection						
Over Voltage Protection	58V	60V	27.6-32.4V	27.6-32.4V	29-34V	29-33V
Overload Protection	110-160%	110-180%	105-160%	105-160%	105-150%	105-150%
Constant Current Limiting	-	-	√	√	-	√
Machanical						
Casing	aluminum	aluminum	plastic	plastic	aluminum	aluminum
Installation*	D, P	D, P	D	D	D	D
Dimensions (WxHxD)	50x148x165	50x148x165	78x56x93	78x56x93	55.5x100x125.2	65.5x100x125.2
Operating Temperature						
-10˚C to 60˚C	√	√	-	-	√	√
-20˚C to 60˚C	-	-	√	√	-	-
-20˚C to 75˚C	-	-	-	-	-	-
-40˚C to 75˚C	-	-	-	-	-	-
Regulatory Approvals						
CE / FCC	√	√	√	√	√	√
UL60950-1	√	√	√	√	-	-
UL508	-	-	-	-	√	√
E-Mark	√	-	-	-	-	-
Page No.	235	236	237	237	238	238

* D: DIN-Rail Mounting, P: Panel Mounting, R: Rack Mounting, W: Wall Mounting

Selection Guide / Accessories

Industrial Power Supplies >>					
Model Name	DR-75-48	DR-120-48	SDR-240-48	SDR-480-48	MDR-40-48
Output					
DC Voltage	48-53VDC	48-53VDC	48-55VDC	48-55VDC	48-56VDC
Current Range	0-1.6A	0-2.5A	5A	10A	0-0.83A
Rated Power	76.8W	120W	240W	480W	39.8W
Input					
12 - 36VDC	-	-	-	-	-
85 - 264VAC / 120 - 370VDC	√	-	-	-	√
88 - 264VAC / 120 - 370VDC	-	-	√	√	-
88 - 132VAC / 176 - 264VDC	-	√	-	-	-
Protection					
Over Voltage Protection	58-65V	58-65V	56-65V	56-65V	57.6-64.8V
Overload Protection	105-150%	105-150%	110-150%	110-150%	105-150%
Constant Current Limiting	√	√	√	√	√
Machanical					
Casing	aluminum	aluminum	aluminum	aluminum	plastic
Installation*	D	D	D	D	D
Dimensions (WxHxD)	55.5x100x125.2	65.5x100x125.2	63x113.5x125.2	85x124x125.2	40x90x100
Operating Temperature					
-10˚C to 60˚C	√	√	-	-	-
-20˚C to 70˚C	-	-	-	-	√
-25˚C to 70˚C	-	-	√	√	-
-40˚C to 75˚C	-	-	-	-	-
Regulatory Approvals					
CE / FCC	√	√	√	√	√
UL60950-1	-	√	√	√	√
UL508	√	√	√	√	√
E-Mark	-	-	-	-	-
Page No.	239	239	240	240	241

* D: DIN-Rail Mounting, P: Panel Mounting, R: Rack Mounting, W: Wall Mounting

Selection Guide / Accessories

Power Adapters >>				
Model Name	AS-120P-48	41-136040	41-136041	41-136042
Output				
DC Voltage	48VDC	12VDC	12VDC	12VDC
Current Range	0-2.5A	0-3A	0-3A	0-3A
Rated Power	120W	36W	36W	36W
Input				
90 - 264VDC	√	√	√	√
Machanical				
Casing	plasitc	plastic	plastic	plastic
Installation*	-	-	-	-
Operating Temperature				
0˚C to 55˚C	√	-	-	-
-40˚C to 75˚C	-	√	√	√
Output Connector				
DC Jack with latch	√	-	√	-
Open Wire for Terminal Block	-	-	-	√
DC Plug	-	√	-	-
Page No.	241	242	242	243

Power Adapters >>			
Model Name	41-136043	41-136044	41-136046
Output			
DC Voltage	12VDC	12VDC	12VDC
Current Range	0-3A	0-3A	0-3A
Rated Power	36W	36W	36W
Input			
90 - 264VDC	√	√	√
Machanical			
Casing	aluminum	aluminum	aluminum
Installation*	W	W	W
Operating Temperature			
0˚C to 55˚C	-	-	-
-40˚C to 75˚C	√	√	√
Output Connector			
DC Jack with latch	-	√	-
Open Wire for Terminal Block	-	-	√
DC Plug	√	-	-
Page No.	243	244	244

* D: DIN-Rail Mounting, P: Panel Mounting, R: Rack Mounting, W: Wall Mounting

GE3000 Series

PCI Express Gigabit Ethernet Adapter

Value

- PCI Express 1.0a compliant
- 1000Mbps-Full-duplex, 10/100Mbps-Full/Half-duplex
- 0°C to 45°C (32°F to 113°F) operating temperature range
- Supports Jumbo Frame up to 7K (Vista) and 4K (XP and other OS)
- Preboot Execution Environment (PXE) 2.1

Features

- 1000Mbps-Full-duplex, 10/100Mbps-Full/Half-duplex, Auto-Negotiation, Auto-MDI/MDIX
- Jumbo Frame up to 7K (Vista) and 4K (XP and other OS)
- PCI Express 1.0a compliant
- TCP segmentation/large send offload
- Microsoft NDIS5 (IP, TCP, UDP) checksum of flood
- Preboot Execution Environment (PXE) 2.1
- Advanced Configuration Power Management Interface (ACPI) 2.0
- Supports Wake-on-LAN remote wake-up (GE3000TX only)
- IEEE802.1Q VLAN Tagging
- IEEE802.1p Layer 2 Priority Tagging
- RFC 1157 SNMP v1 compliant
- Cable diagnostic utility
- 0°C to 45°C (32°F to 113°F) operating temperature range

Ordering Information

GE3000TX	10/100/1000BASE-TX Gigabit Ethernet Adapter
GE3000SX	1000BASE-SX Multi Mode (SC) Fiber Gigabit Ethernet Adapter
GE3000LX-10	1000BASE-LX Single Mode (SC) - 10Km Fiber Gigabit Ethernet Adapter
GE3000LX-20	1000BASE-LX Single Mode (SC) - 20Km Fiber Gigabit Ethernet Adapter

Specifications

Technology	
Standards	• IEEE802.3 10BASE-T, IEEE802.3u 100BASE-TX/100BASE-FX, IEEE802.3ab 1000BASE-T, IEEE802.3z 1000BASE-SX/1000BASE-LX, IEEE802.3x, IEEE802.1Q, IEEE802.1p
Protocols	• SNMP V1
Processing Type	• IEEE802.3x full-duplex flow control
Driver	• Microsoft Windows 2000/ XP/ 2003/ Vista(32bit/64bit), Windows 7(32bit/64bit) • Linux 2.4x/2.6x • Novell Netware 5.x/6.x

Power	
Power Consumption	• 2.3W Max.

Mechanical	
Dimensions	• 125mm (L) x 121mm (W) (4.92" (L) x 4.76" (W))
Weight	• 80Kg (0.18lb.)

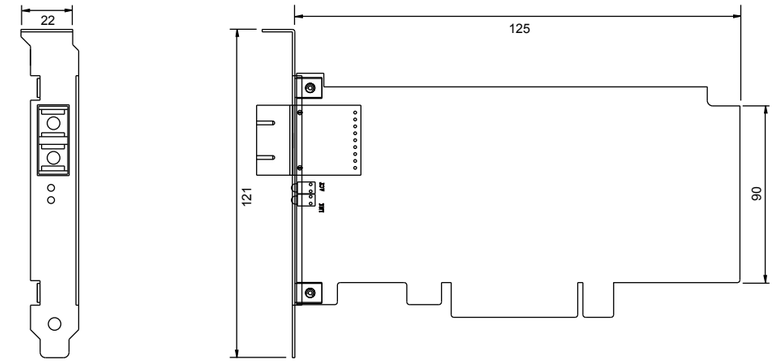
Interface	
Ethernet Port	• Gigabit: 1port
LED Indicators	• Per Unit: Link, Activity

Environment	
Operating Temperature	• 0°C to 45°C (32°F to 113°F)
Storage Temperature	• -10°C to 70°C (14°F to 158°F)
Ambient Relative Humidity	• 5% to 95% (non-condensing)

Regulatory Approvals	
ISO	• Manufactured in an ISO9001 facility
Emission Compliance	• CE Mark Class B • FCC Part 15 Class B

Diagrams

Unit: mm



EN301 Series

32bit PCI-Bus 100BASE-FX Ethernet Adapter

Value

- PCI 2.2 Specification compliant
- 0°C to 45°C (32°F to 113°F) operating temperature range
- Advanced Configuration Power Interface (ACPI)

Features

- PCI 2.2 Specification compliant
- Separate 2K Bytes FIFO for receive and transmit controllers
- Advanced Configuration Power Interface (ACPI):
  - Supports PC99, PC2001 and Net PC requirements
  - Supports PCI Bus Power Management Interface Specification Version 1.0/1.1
  - Supports ACPI Specification 1.0
  - Support Network Device Class Power Management Specification Version 1.0a
  - Wake-up supports magic packet
- MAC Enhancement Function:
  - UDP, TCP/IP checksum for IPv4 frames
  - Statistics of 12 sets of hardware Management Information BASE counters
- Utilities:
  - Windows auto installation
  - MS-DOS diagnostics
  - Desktop Management Interface (DMI) 2.0 (Vista is not support)
- 0°C to 45°C (32°F to 113°F) operating temperature range

Ordering Information

EN301C	100BASE-FX Multi Mode (SC) Ethernet Adaptor
EN301T	100BASE-FX Multi Mode (ST) Ethernet Adaptor
EN301C-20	100BASE-FX Single Mode (SC) - 20Km Ethernet Adaptor
EN301C-40	100BASE-FX Single Mode (SC) - 40Km Ethernet Adaptor
EN301T-20	100BASE-FX Single Mode (ST) - 20Km Ethernet Adaptor
EN301CA-20	100BASE-FX Single Mode (SC) WDM -TX:1310nm/RX:1550nm - 20 Km Ethernet Adaptor
EN301CB-20	100BASE-FX Single Mode (SC) WDM -TX:1550nm/RX:1310nm - 20 Km Ethernet Adaptor
EN301CA-40	100BASE-FX Single Mode (SC) WDM -TX:1310nm/RX:1550nm - 40 Km Ethernet Adaptor
EN301CB-40	100BASE-FX Single Mode (SC) WDM -TX:1550nm/RX:1310nm - 40 Km Ethernet Adaptor
EN301LC	100BASE-FX Multi Mode (SC) Ethernet Adaptor with low-profile bracket
EN301LT	100BASE-FX Multi Mode (ST) Ethernet Adaptor with low-profile bracket
EN301LC-20	100BASE-FX Single Mode (SC) - 20 Km Ethernet Adaptor with low-profile bracket
EN301LC-40	100BASE-FX Single Mode (SC) - 40 Km Ethernet Adaptor with low-profile bracket
EN301LT-20	100BASE-FX Single Mode (ST) - 20 Km Ethernet Adaptor with low-profile bracket
EN301LCA-20	100BASE-FX Single Mode (SC) WDM -TX:1310nm/RX:1550nm - 20 Km Ethernet Adaptor with low-profile bracket
EN301LCB-20	100BASE-FX Single Mode (SC) WDM -TX:1550nm/RX:1310nm - 20 Km Ethernet Adaptor with low-profile bracket
EN301LCA-40	100BASE-FX Single Mode (SC) WDM -TX:1310nm/RX:1550nm - 40 Km Ethernet Adaptor with low-profile bracket
EN301LCB-40	100BASE-FX Single Mode (SC) WDM -TX:1550nm/RX:1310nm - 40 Km Ethernet Adaptor with low-profile bracket

Specifications

Technology	
Standards	• IEEE802.3u 100BASE-FX, IEEE802.3x, IEEE802.1Q
Protocols	• IEEE802.3x full-duplex flow control; Multiple pause frame XON/XOFF
Driver	• Microsoft Windows 95 (including OSR2), Windows 98 (including SE), Windows ME, Windows 2000, Windows XP, Windows Vista (32bit/64bit), Windows NT 4.0, Windows 7 (32bit/64bit) • LAN Manager, LANtastic, PC-NFS • Novell Netware 3.11, 3.12, 4.x, 5.x, 6.0, Client 32 • Linux Kernel 2.2.x/2.4.x/2.6.x • FreeBSD 3.2, 4.0, 4.11, 4.2, 5.x • SCO UnixWare 7.x/OpenUnix 8, SCO UNIX 5.0

Power	
Power Consumption	• 1W Max.

Mechanical	
Dimensions	• EN301: 133mm (L) x 117.5mm (W) (5.23" (L) x 4.62" (W)) • EN301L: 133mm (L) x 80mm (W) (5.23" (L) x 3.14" (W))
Weight	• 80g (0.18lb.)

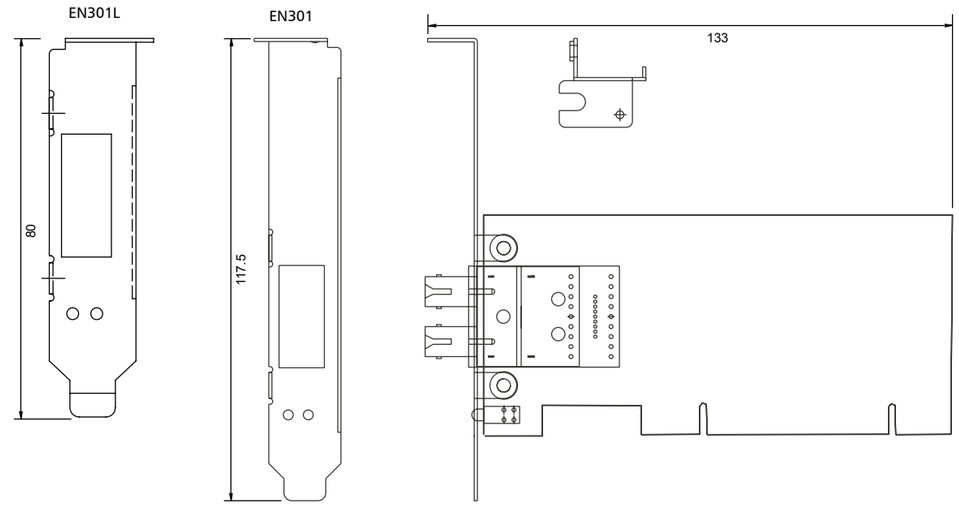
Interface	
Ethernet Port	• 100BASE-FX: 1 port
LED Indicators	• Per Unit: Link/Activity, Speed

Environment	
Operating Temperature	• 0°C to 45°C (32°F to 113°F)
Storage Temperature	• -10°C to 70°C (14°F to 158°F)
Ambient Relative Humidity	• 5% to 95% (non-condensing)

Regulatory Approvals	
ISO	• Manufactured in an ISO9001 facility
Emission Compliance	• CE Mark Class B • FCC Part 15 Class B

Diagrams

Unit: mm



DD-85-48 Series

85W/1.78A 48VDC Industrial Power Supply

Protection	
Over Voltage Protection	• 58V
Over-Current Protection	• 110% - 160% of rated value

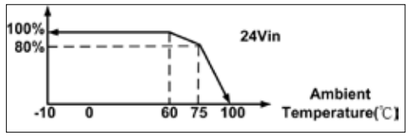
Mechanical	
Dimensions	• 50mm (W) x 148mm (D) x 165mm (H) (1.96" (W) x 5.82" (D) x 6.49" (H))
Weight	• 1.2Kg (2.64lbs)
Installation	• DIN-Rail, Panel Mounting (mounting kit is included both)

Environment	
Operating Temperature	• -10°C to 60°C (-14°F to 140°F)
Storage Temperature	• -20°C to 85°C (-4°F to 185°F)
Working Humidity	• 0% to 95% RH

Specifications

Output	
DC Voltage	• 48VDC
Current Range	• 0 - 1.78A
Rated Power	• 85W

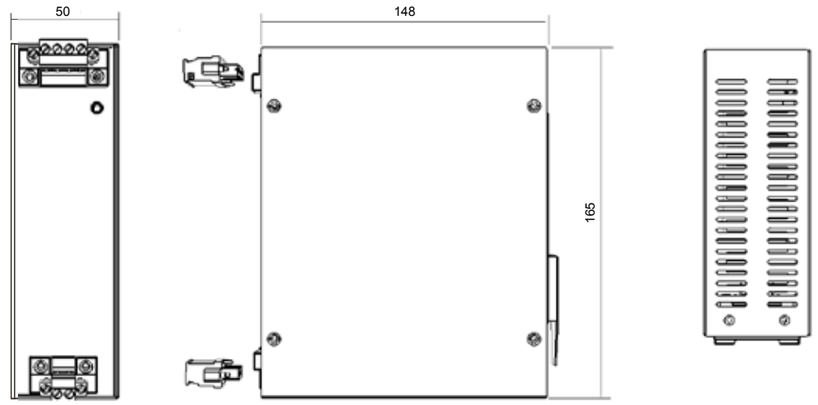
De-rating Curve



Input	
Voltage Range	• 12 - 36VDC
Inrush Current	• 13A/12VDC or 50A/36VDC

Diagrams

Unit: mm



Front Side Back

DD-85-55 Series

85W/1.55A 55VDC Industrial Power Supply

Protection	
Over Voltage Protection	• 60V
Over-Current Protection	• 110% to 180% of rated value

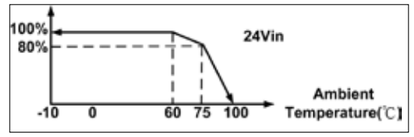
Mechanical	
Dimensions	• 50mm (W) x 148mm (D) x 165mm (H) (1.96" (W) x 5.82" (D) x 6.49" (H))
Weight	• 1.2Kg (2.64lbs)
Installation	• DIN-Rail, Panel Mounting (mounting kit is included both)

Environment	
Operating Temperature	• -10°C to 60°C (-14°F to 140°F)
Storage Temperature	• -20°C to 85°C (-4°F to 185°F)
Working Humidity	• 0% to 95% RH

Specifications

Output	
DC Voltage	• 55VDC
Current Range	• 0 - 1.55A
Rated Power	• 85W

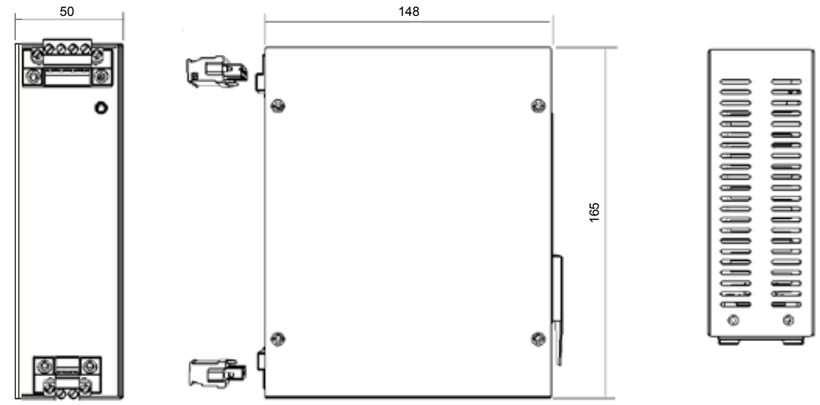
De-rating Curve



Input	
Voltage Range	• 12 - 36VDC
Inrush Current	• 13A/12VDC or 50A/36VDC

Diagrams

Unit: mm



Front Side Back

DR-30-24

30W/1.5A DIN-Rail 24VDC Industrial Power Supply

Specifications

Output	
DC Voltage	• 24VDC (Adjustable Range 21.6 - 26.4VDC)
Current Range	• 0 - 1.5A
Rated Power	• 36W

Input	
Voltage Range	• 85 - 264VAC (47 - 63Hz) or 120 - 370VDC
Inrush Current	• 15A/115VAC or 30A/230VAC

Protection	
Over Voltage Protection	• 27.6 - 32.4V
Over-Current Protection	• 105 - 160% rated output power
Protection Type	• Constant current limiting, recovers automatically

Mechanical	
Dimensions	• 78mm (W) x 56mm (D) x 93mm (H) (3.17" (W) x 2.2" (D) x 3.66" (H))
Weight	• 0.27Kg

Environment	
Operating Temperature	• -20°C to 60°C (-4°F to 140°F)
Storage Temperature	• -40°C to 85°C (-40°F to 185°F)
Working Humidity	• 20% to 90% non-condensing
Storage Humidity	• 10% to 95% non-condensing

Regulatory Approvals	
Safety	• UL60950-1, TUV EN60950-1 approved, design refer to EN50178
EMI Conduction & Radiation	• EN55011, EN55022 (CISPR22) Class B
EMS Immunity	• EN61000-4-2, 3, 4, 5, 6, 8, 11, ENV50204, EN55024, • EN61000-6-2 (EN50082-2), EN61204-3 heavy industrial level, Criteria A

DR-60-24

60W/2.5A DIN-Rail 24VDC Industrial Power Supply

Specifications

Output	
DC Voltage	• 24VDC (Adjustable Range 21.6 - 26.4VDC)
Current Range	• 0 - 2.5A
Rated Power	• 60W

Input	
Voltage Range	• 88 - 264VAC (47 - 63Hz) or 120 - 370VDC
Inrush Current	• 18A/115VAC or 36A/230VAC

Protection	
Over Voltage Protection	• 27.6 - 32.4V
Over-Current Protection	• 105 -160% rated output power
Protection Type	• Constant current limiting, recovers automatically

Mechanical	
Dimensions	• 78mm (W) x 56mm (D) x 93mm (H) (3.17" (W) x 2.2" (D) x 3.66" (H))
Weight	• 0.3Kg

Environment	
Operating Temperature	• -20°C to 60°C (-4°F to 140°F)
Storage Temperature	• -40°C to 85°C (-40°F to 185°F)
Working Humidity	• 20% to 90% non-condensing
Storage Humidity	• 10% to 95% non-condensing

Regulatory Approvals	
Safety	• UL60950-1, TUV EN60950-1 approved, design refer to EN50178
EMI Conduction & Radiation	• EN55011, EN55022 (CISPR22) Class B
EMS Immunity	• EN61000-4-2, 3, 4, 5, 6, 8, 11, ENV50204, EN55024, • EN61000-6-2 (EN50082-2), EN61204-3 heavy industrial level, Criteria A

DR-75-24

75W/3.2A DIN-Rail 24VDC Industrial Power Supply

Specifications

Output	
DC Voltage	• 24VDC (Adjustable Range 24 - 28VDC)
Current Range	• 0 - 3.2A
Rated Power	• 76.8W

Input	
Voltage Range	• 85 - 264VAC (47 - 63Hz) or 120 - 370VDC
Inrush Current	• 20A/115VAC or 40A/230VAC

Protection	
Over Voltage Protection	• 29 - 34V
Over-Current Protection	• 105 - 150% rated output power
Protection Type	• Constant current limiting, recovers automatically

Mechanical	
Dimensions	• 55.5mm (W) x 100mm (D) x 125.2mm (H) (2.19" (W) x 3.94" (D) x 4.93" (H))
Weight	• 0.6Kg

Environment	
Operating Temperature	• -10°C to 60°C (-14°F to 140°F)
Storage Temperature	• -20°C to 85°C (-4°F to 185°F)
Working Humidity	• 20% to 90% non-condensing
Storage Humidity	• 10% to 95% non-condensing

Regulatory Approvals	
Safety	• UL508, TUV EN60950-1 approved
EMI Conduction & Radiation	• EN55011, EN55022 (CISPR22) Class B
EMS Immunity	• EN61000-4-2, 3, 4, 5, 6, 8, 11, ENV50204, EN55024, • EN61000-6-2 (EN50082-2) heavy industrial level, Criteria A

DR-120-24

120W/5A DIN-Rail 24VDC Industrial Power Supply

Specifications

Output	
DC Voltage	• 24VDC (Adjustable Range 24 - 28VDC)
Current Range	• 0 - 5A
Rated Power	• 120W

Input	
Voltage Range	• 88 -132VAC /176 - 264VAC (47 - 63Hz) by switch, or 248 - 370VDC
Inrush Current	• 20A/115VAC or 40A/230VAC

Protection	
Over Voltage Protection	• 29 - 33V
Over-Current Protection	• 105% to 150% rated output power
Protection Type	• Constant current limiting, recovers automatically

Mechanical	
Dimensions	• 65.5mm (W) x 100mm (D) x 125.2mm (H) (2.58" (W) x 3.94" (D) x 4.93" (H))
Weight	• 0.79Kg

Environment	
Operating Temperature	• -10°C to 60°C (-14°F to 140°F)
Storage Temperature	• -20°C to 85°C (-4°F to 185°F)
Working Humidity	• 20% to 90% non-condensing
Storage Humidity	• 10% to 95% non-condensing

Regulatory Approvals	
Safety	• UL508, UL60950 - 1, TUV EN60950-1 approved
EMI Conduction & Radiation	• EN55011, EN55022 (CISPR22) Class B
EMS Immunity	• EN61000-4-2, 3, 4, 5, 6, 8, 11, ENV50204, EN55024, • EN61000-6-2 (EN50082-2) heavy industrial level, Criteria A

DR-75-48

75W/1.6A DIN-Rail 48VDC Industrial Power Supply

Specifications

Output	
DC Voltage	• 48VDC (Adjustable Range 48 - 53VDC)
Current Range	• 0 - 1.6A
Rated Power	• 76.8W

Input	
Voltage Range	• 85-264VAC (47 - 63Hz) or 120 - 370VDC
Inrush Current	• 20A/115VAC or 40A/230VAC

Protection	
Over Voltage Protection	• 58 - 65V
Over-Current Protection	• 105-150% rated output power
Protection Type	• Constant current limiting, recovers automatically

Mechanical	
Dimensions	• 55.5mm (W) x 100mm (D) x 125.2mm (H) (2.19" (W) x 3.94" (D) x 4.93" (H))
Weight	• 0.6Kg

Environment	
Operating Temperature	• -10°C to 60°C (-14°F to 140°F)
Storage Temperature	• -20°C to 85°C (-4°F to 185°F)
Working Humidity	• 20% to 90% non-condensing
Storage Humidity	• 10% to 95% non-condensing

Regulatory Approvals	
Safety	• UL508, TUV EN60950-1 approved
EMI Conduction & Radiation	• EN55011, EN55022 (CISPR22) Class B
EMS Immunity	• EN61000-4-2, 3, 4, 5, 6, 8, 11, ENV50204, EN55024, • EN61000-6-2 (EN50082-2) heavy industrial level, Criteria A

DR-120-48

120W/2.5A DIN-Rail 48VDC Industrial Power Supply

Specifications

Output	
DC Voltage	• 48VDC (Adjustable Range 48 - 53 VDC)
Current Range	• 0 - 2.5A
Rated Power	• 120W

Input	
Voltage Range	• 88-132VAC /176-264VAC (47 - 63Hz) by switch, or 248 - 370VDC
Inrush Current	• 20A/115VAC or 40A/230VAC

Protection	
Over Voltage Protection	• 58 - 65V
Over-Current Protection	• 105 - 150% rated output power
Protection Type	• Constant current limiting, recovers automatically

Mechanical	
Dimensions	• 65.5mm (W) x 100mm (D) x 125.2mm (H) (2.58" (W) x 3.94" (D) x 4.93" (H))
Weight	• 0.79Kg

Environment	
Operating Temperature	• -10°C to 60°C (-14°F to 140°F)
Storage Temperature	• -20°C to 85°C (-4°F to 185°F)
Working Humidity	• 20% to 90% non-condensing
Storage Humidity	• 10% to 95% non-condensing

Regulatory Approvals	
Safety	• UL508, UL60950-1, TUV EN60950-1 approved
EMI Conduction & Radiation	• EN55011, EN55022 (CISPR22) Class B
EMS Immunity	• EN61000-4-2, 3, 4, 5, 6, 8, 11, ENV50204, EN55024, • EN61000-6-2 (EN50082-2) heavy industrial level, Criteria A

SDR-240-48

240W/5A DIN-Rail 48VDC Industrial Power Supply

Specifications

Output	
DC Voltage	• 48VDC (Adjustable Range 48 - 55VDC)
Current Range	• 0 - 5A
Rated Power	• 240W

Input	
Voltage Range	• 88 - 264VAC (47 - 63Hz) or 124 - 370VDC
Inrush Current	• 33A/115VAC or 65A/230VAC

Protection	
Over Voltage Protection	• 56 - 65V
Over-Current Protection	• 110% to150% rated output power
Protection Type	• Constant current limiting, recovers automatically

Mechanical	
Dimensions	• 63mm (W) x 113.5mm (D) x 125.2mm (H) (2.48" (W) x 4.46" (D) x 4.93" (H))
Weight	• 1.03Kg

Environment	
Operating Temperature	• -25°C to 70°C (-13°F to 158°F)
Storage Temperature	• -20°C to 85°C (-4°F to 185°F)
Working Humidity	• 20% to 95% non-condensing
Storage Humidity	• 10% to 95% non-condensing

Regulatory Approvals	
Safety	• UL508, TUV EN60950-1 approved
EMI Conduction & Radiation	• EN55022 (CISPR22) Class B
EMS Immunity	• EN61000-4-2, 3, 4, 5, 6, 8, 11, ENV50204, EN55024, • EN61000-6-2 (EN50082-2) heavy industrial level, Criteria A

SDR-480-48

480W/10A DIN-Rail 48VDC Industrial Power Supply

Specifications

Output	
DC Voltage	• 48VDC (Adjustable Range 48 - 55 VDC)
Current Range	• 0 - 10A
Rated Power	• 480W

Input	
Voltage Range	• 88 - 264VAC (47 - 63Hz) or 124 - 370VDC
Inrush Current	• 33A/115VAC or 65A/230VAC

Protection	
Over Voltage Protection	• 56 - 65V
Over-Current Protection	• 110% to150% rated output power
Protection Type	• Constant current limiting, recovers automatically

Mechanical	
Dimensions	• 85mm (W) x 124mm (D) x 125.2mm (H) (3.34" (W) x 4.88" (D) x 4.93" (H))
Weight	• 1.03Kg

Environment	
Operating Temperature	• -25°C to 70°C (-13°F to 158°F)
Storage Temperature	• -20°C to 85°C (-4°F to 185°F)
Working Humidity	• 20% to 95% non-condensing
Storage Humidity	• 20% to 95% non-condensing

Regulatory Approvals	
Safety	• UL508, UL60950-1, TUV EN60950-1 approved
EMI Conduction & Radiation	• EN55022 (CISPR22) Class B
EMS Immunity	• EN61000-4-2, 3, 4, 5, 6, 8, 11, ENV50204, EN55024, • EN61000-6-2 (EN50082-2) heavy industrial level, Criteria A

MDR-40-48

40W/0.83A 48VDC Industrial Power Supply

Specifications

Output	
DC Voltage	• 48VDC (Adjustable Range 48 - 56VDC)
Current Range	• 0 - 0.83A
Rated Power	• 40W

Input	
Voltage Range	• 85 - 264VAC ; 120 - 370VDC
Inrush Current	• Cold start, 30A @ 115VAC, 60A @ 230VAC

Specifications

Protection	
Over Voltage Protection:	• 57.6 - 64.8V

Mechanical	
Dimensions	• 40mm (W) x 100mm (D) x 90mm (H) (1.57" (W) x 3.93" (D) x 3.54" (H))
Weight	• 0.3Kg (0.66lbs)
Installation	• DIN-Rail

Environment	
Operating Temperature	• -20°C to 70°C (-4°F to 158°F) Tested @ -34°C to 74°C (-29.2°F to 165.2°F)
Storage Temperature	• -40°C to 85°C (-40°F to 185°F)
Working Humidity:	• 10% to 95% RH

AS-120P-48

120W/2.5A 48VDC Power Adapter

Specifications

Output	
Output Rating	• 120W, 48VDC, 0 - 2.5A

Input	
Input Rating	• 90 - 264VAC (47 - 63Hz)

Others	
Casing	• Plastic case
Operating Temperature	• 0°C to 50°C (32°F to 122°F)
Output Connector	• DC Jack with latch

Ordering Information

The following power adaptors can be used with EX34000, EX38000, EX38000A, EX45000, EX46000, EX48000, EX48000A, EX78000, EL1032, EL1033 series.

AS-120P-48-X	120W/2.5A 48VDC Power Adapter

Input Plug Options:

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

*Complies with NEMA TS1 & TS2 Environmental requirements for traffic control equipment

41-136040

36W/3A 12VDC Hardened Power Adapter

Specifications

Output	
Output Rating	• 36W, 12VDC, 0 - 3A

Input	
Input Rating	• 90 - 264VAC (47 - 63Hz)

Others	
Casing	• Plastic case
Operating Temperature	• -40°C to 75°C (-40°F to 167°F)
Output Connector	• DC plug

Ordering Information

The following power adaptors can be used with ED3101, ED3331 series.

41-136040-X	36W/3A 12VDC Hardened Power Adapter

Input Plug Options:

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

*Complies with NEMA TS1 & TS2 Environmental requirements for traffic control equipment

41-136041

36W/3A 12VDC Hardened Power Adapter

Specifications

Output	
Output Rating	• 36W, 12VDC, 0 - 3A

Input	
Input Rating	• 90 - 264VAC (47 - 63Hz)

Others	
Casing	• Plastic case
Operating Temperature	• -40°C to 75°C (-40°F to 167°F)
Output Connector	• DC Jack with latch

Ordering Information

The following power adaptors can be used with EX33000, EX35000, EX41000, EX43000, EX47000, EX61000, EX61000A, EX62000, EX63000, EX65000, EX71000, EX72000, EX73000, EX94000, EX95000, EX96000, EL900 EL9000, EL9020, EL9100, EL1141, ED3341, ED3344, ED3371, ED3141, ED3171, SE5100, SE5300, SE6100, SE6300 series.

41-136041-X	36W/3A 12VDC Hardened Power Adapter

Input Plug Options:

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

*Complies with NEMA TS1 & TS2 Environmental requirements for traffic control equipment

41-136042

36W/3A 12VDC Hardened Power Adapter

Specifications

Output	
Output Rating	• 36W, 12VDC, 0 - 3A
Input	
Input Rating	• 90 - 264VAC (47 - 63Hz)
Others	
Casing	• Plastic case
Operating Temperature	• -40°C to 75°C (-40°F to 167°F)
Output Connector	• Open wire for Terminal Block

Ordering Information

The following power adaptors can be used with EX33000, EX35000, EX41000, EX43000, EX47000, EX61000, EX61000A, EX62000, EX63000, EX65000, EX71000, EX72000, EX73000, EX94000, EX95000, EX96000, EL900, EL9000, EL9020, EL9100, EL1141, ED3341, ED3344, ED3371, ED3141, ED3171, SE5100, SE5300, SE6100, SE6300 series.

41-136042-X	36W/3A 12VDC Hardened Power Adapter

Input Plug Options:

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

*Complies with NEMA TS1 & TS2 Environmental requirements for traffic control equipment

41-136043

36W/3A 12VDC Hardened Power Adapter

Specifications

Output	
Output Rating	• 36W, 12VDC, 0 - 3A
Input	
Input Rating	• 90 - 264VAC (47 - 63Hz)
Others	
Casing	• Aluminum case
Operating Temperature	• -40°C to 75°C (-40°F to 167°F)
Output Connector	• DC plug

Ordering Information

The following power adaptors can be used with ED3101, ED3331 series.

41-136043-X	36W/3A 12VDC Hardened Power Adapter

Input Plug Options:

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

*Complies with NEMA TS1 & TS2 Environmental requirements for traffic control equipment

41-136044

75W/1.6A DIN-Rail 12VDC Industrial Power Supply

Specifications

Output	
Output Rating	• 36W, 12VDC, 0 - 3A
Input	
Input Rating	• 90 - 264VAC (47 - 63Hz)
Others	
Casing	• Aluminum case
Operating Temperature	• -40°C to 75°C (-40°F to 167°F)
Output Connector	• DC Jack with latch

Ordering Information

The following power adaptors can be used with EX33000, EX35000, EX41000, EX43000, EX47000, EX61000, EX61000A, EX62000, EX63000, EX65000, EX71000, EX72000, EX73000, EX94000, EX95000, EX96000, EL900 EL9000, EL9020, EL9100, EL1141, ED3341, ED3344, ED3371, ED3141, ED3171, SE5100, SE5300, SE6100, SE6300 series.

41-136044-X	36W/3A 12VDC Hardened Power Adapter

Input Plug Options:

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

*Complies with NEMA TS1 & TS2 Environmental requirements for traffic control equipment

41-136046

36W/3A 12VDC Hardened Power Adapter

Specifications

Output	
Output Rating	• 36W, 12VDC, 0 - 3A
Input	
Input Rating	• 90 - 264VAC (47 - 63Hz)
Others	
Casing	• Aluminum case
Operating Temperature	• -40°C to 75°C (-40°F to 167°F)
Output Connector	• Open Wire for Terminal Block

Ordering Information

The following power adaptors can be used with EX33000, EX35000, EX41000, EX43000, EX47000, EX61000, EX61000A, EX62000, EX63000, EX65000, EX71000, EX72000, EX73000, EX95000, EX96000, EL1141, EL900, EL9000, EL9020, EL9100, ED3341, ED3344, ED3371, ED3141, ED3171, SE5100, SE5300, SE6100, SE6300, SW5400, FT5702, TS130, TS930 series.

41-136046-X	36W/3A 12VDC Hardened Power Adapter

Input Plug Options:

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

*Complies with NEMA TS1 & TS2 Environmental requirements for traffic control equipment

Mounting Kits

KR-BKEL900

19" Rack mount kit (Black)
For EL900, EL9000, EL9020 EL9100, EL1141, ED3341, ED3344, ED3371, ED3141, ED3171 series

KR-BK-46-400

19" Rack mount kit (Black)
For EX43000 series

KR-BK71000X

19" Rack mount kit (Black)
For EX71000, EX61000A, ED3175 series

KR-BK72-400

19" Rack mount kit (Black)
For EX72000, EX62000 series

KR-BK74-400

19" Rack mount kit (Black)
For EX74000 series

KR-AE612-400

19" Rack mount kit (Black)
For EX87000, EX77000, EX76000, EX3224SF, EX3224S, EX27000, EX2224S, EX1616W, EX1624W, XM3017M, EMC1200R, EMMC800M series

KR-EW612-400

19" Rack mount kit (White)
For EX1608SF series

KR-BK1600R-410

19" Rack mount kit (Black)
For EMC1600 series

KP-AA96-480

Panel mount kit
For EX33000, EX34000, EX35000, EX36000, EX36100, EX41000, EX43000, EX45000, EX46000, EX46100, EX47000, EX61000A, EX63000, EX65000, EX71000, EX73000, EX78000, EX94000, EX95000, EL900, EL9000, EL9020, EL9100, EL1141, ED3341, ED3344, ED3371, ED3141, ED3171 series

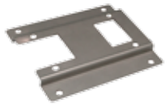
KP-BK6212

Panel mount kit (Black)
For EX74000, EX72000, EX62000, TransRack series

KR-AA51

Panel mount kit
For FT5702, SE5100, SE5300, SE6100, SE6300 series

KP-AA54



Panel mount kit
For SW5400 series

KD-31003

DIN-Rail mount kit
For ED3101, ED3331 series
(Can be mounted using hardware version V3 and above with holes on the bottom cases)

KR-AA96000

DIN-Rail mount kit
For EX33000, EX34000, EX35000, EX36000, EX36100, EX41000, EX43000, EX46100, EX47000, EX61000A, EX62000, EX63000, EX65000, EX71000, EX72000 EX73000, EX94000, EX95000, EL900, EL9000, EL9020, EL9100, EL1141, ED3341, ED3344, ED3371, ED3141, ED3171 series

KR-BK17

19" Rack mount kit (Black)
For EX17008, EX17008A series

TransRack Series

Value

- DIN-Rail devices inside a standard 19" rack or cabinet
- Unique depth adjustment feature to fit any size of equipment
- One standard 35mm (1.38") DIN-Rail track included

Features

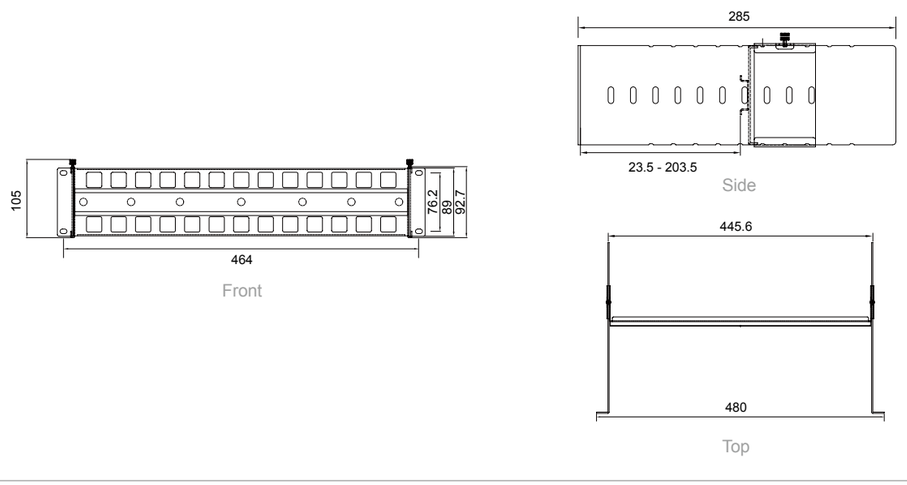
- Patent-pending design
- Heavy-duty cold-rolled steel
- Adjustable in depth from 50mm (2") to 210mm (8.25")
- Dimensions : 464mm (19") x 105mm (4.13") x 285mm (11.22") (W x H x D)

Ordering Information

TransRack	KR-DINRAILB

Diagrams

Unit: mm



SFP Fiber Transceivers Series

Value

- All SFPs have been tested with the best operating performance on EtherWAN switches
- Gigabit Ethernet applications and are compliant to IEEE802.3z
- The characteristics are performed in accordance with Telcordia Specification GR-468-CORE

Features

- Data Rate: 1.25Gbps, NRZ
- Single +3.3V Power Supply
- RoHS Compliant and Lead-free
- AC/AC Differential Electrical Interface
- Eye Safety Designed to meet Laser Class 1 comply with EN60825-1
- Compliant with Multi-Source Agreement (MSA) Small Form Factor Pluggable (SFP)
- Compliance with specifications for IEEE-802.3z Gigabit Ethernet at 1.25 Gbps
- EMC requirement meets FCC in the United States and CENELEC EN55022 (CISPR 22) in Europe

Ordering Information

Non-Hardened SFP Series

Model Number	Designation	Distance	Cable Type	Wavelength (nm)	Connector Type	Link Budget
EXFE-R1S4-05H1	100BASE-TX	100m	-	-	TX	-
EX-0155NSP-MB2L	100BASE-MM	2Km	62.5/125μm, MM	1310	Duplex LC	13 dBm
EX-0155TSP-MB5L	100BASE-SM	15Km	9/125μm, SM	1310	Duplex LC	17 dBm
EX-0155TSP-MB6L	100BASE-SM	40Km	9/125μm, SM	1310	Duplex LC	29 dBm
EX38-A3S-TC-N-B3	100BASE-MM	2Km	62.5/125 μm/ 50/125 μm, MM	TX:1310 / RX:1550	Single LC	18 dBm
EX48-A3S-TC-N-B5	100BASE-MM	2Km	62.5/125 μm/ 50/125 μm, MM	TX:1550 / RX:1310	Single LC	18 dBm
EX-0155TBP-MB5L	100BASE-SM	20Km	9/125μm, SM	TX:1310 / RX:1550	Single LC	18 dBm
EX-0155TBP-LB5L	100BASE-SM	20Km	9/125μm, SM	TX:1550 / RX:1310	Single LC	18 dBm
EX-0155TBP-MB6L	100BASE-SM	40Km	9/125μm, SM	TX:1310 / RX:1550	Single LC	26 dBm
EX-0155TBP-KB6L	100BASE-SM	40Km	9/125μm, SM	TX:1550 / RX:1310	Single LC	26 dBm
EX-1250NSP-SB1L	1000BASE-SX	275M/ 550M	62.5/125 μm/ 50/125 μm, MM	850	Duplex LC	7.5 dBm
EX-1250TSP-MB2L	1000BASE-SX	2KM	62.5/125μm, MM	1310	Duplex LC	13.5 dBm
EX-1250TSP-MB4L	1000BASE-LX	10KM	9/125μm, SM	1310	Duplex LC	11.5 dBm
EX-1250TSP-MB5L	1000BASE-LX	20KM	9/125μm, SM	1310	Duplex LC	15 dBm
EX-1250TSP-NB6L	1000BASE-LX	40KM	9/125μm, SM	1310	Duplex LC	20 dBm
EX-1250TSP-KB8L	1000BASE-LX	70KM	9/125μm, SM	1550	Duplex LC	23 dBm
EX-1250TSP-CB8L	1000BASE-LX	70KM	9/125μm, SM	1550	Duplex LC	24 dBm
EX-1250TBP-MB1L	1000BASE-BX WDM	550M	62.5/125 μm/ 50/125 μm, MM	TX:1310 / RX:1550	Single LC	7 dBm
EX-1250TBP-MB1L	1000BASE-BX WDM	550M	62.5/125 μm/ 50/125 μm, MM	TX:1550 / RX:1310	Single LC	7 dBm
EX-1250TBP-MB4L	1000BASE-BX WDM	10KM	9/125μm, SM	TX:1310 / RX:1550	Single LC	12 dBm
EX-1250TBP-KB4L	1000BASE-BX WDM	10KM	9/125μm, SM	TX:1550 / RX:1310	Single LC	12 dBm
EX-1250TBP-MB5L	1000BASE-BX WDM	20KM	9/125μm, SM	TX:1310 / RX:1550	Single LC	15 dBm
EX-1250TBP-KB5L	1000BASE-BX WDM	20KM	9/125μm, SM	TX:1550 / RX:1310	Single LC	15 dBm
EX-1250TBP-NB6L-D	1000BASE-BX WDM	40KM	9/125μm, SM	TX:1310 / RX:1550	Single LC	20 dBm
EX-1250TBP-KB6L-D	1000BASE-BX WDM	40KM	9/125μm, SM	TX:1550 / RX:1310	Single LC	20 dBm
EX-1250TBP-NB7L-D	1000BASE-BX WDM	60KM	9/125μm, SM	TX:1310 / RX:1550	Single LC	25 dBm
EX-1250TBP-KB7L-D	1000BASE-BX WDM	60KM	9/125μm, SM	TX:1550 / RX:1310	Single LC	23 dBm
EX-1250TBP-CB8L-D (1490nm)	1000BASE-BX WDM	80KM	9/125μm, SM	TX:1490 / RX:1570	Single LC	24 dBm
EX-1250TBP-CB8L-D (1570nm)	1000BASE-BX WDM	80KM	9/125μm, SM	TX:1570 / RX:1490	Single LC	24 dBm

Hardened SFP Series

Model Number	Designation	Distance	Cable Type	Wavelength (nm)	Connector Type	Link Budget
EX-0155NSP-MB2L-A	100BASE-MM	2Km	62.5/125μm, MM	1310	Duplex LC	13 dBm
EX-0155TSP-MB5L-A	100BASE-SM	15Km	9/125μm, SM	1310	Duplex LC	19 dBm
EX-0155TSP-MB6L-A	100BASE-SM	40Km	9/125μm, SM	1310	Duplex LC	30 dBm
EX38-A3S-TI-N-B3	100BASE-MM	2Km	62.5/125 μm/ 50/125 μm, MM	TX:1310 / RX:1550	Single LC	18 dBm
EX48-A3S-TI-N-B5	100BASE-MM	2Km	62.5/125 μm/ 50/125 μm, MM	TX:1550 / RX:1310	Single LC	18 dBm
EX-0155TBP-MB5L-A	100BASE-SM	20Km	9/125μm, SM	TX:1310 / RX:1550	Single LC	18 dBm
EX-0155TBP-LB5L-A	100BASE-SM	20Km	9/125μm, SM	TX:1550 / RX:1310	Single LC	18 dBm
EX-0155TBP-MB6L-A	100BASE-SM	40Km	9/125μm, SM	TX:1310 / RX:1550	Single LC	26 dBm
EX-0155TBP-KB6L-A	100BASE-SM	40Km	9/125μm, SM	TX:1550 / RX:1310	Single LC	26 dBm
EX-1250NSP-SB1L-A	1000BASE-SX	275M/ 550M	62.5/125 μm/ 50/125 μm, MM	850	Duplex LC	7.5 dBm
EX-1250TSP-MB2L-A	1000BASE-SX	2KM	62.5/125μm, MM	1310	Duplex LC	13.5 dBm
EX-1250TSP-MB4L-A	1000BASE-LX	10KM	9/125μm, SM	1310	Duplex LC	11.5 dBm
EX-1250TSP-MB5L-A	1000BASE-LX	20KM	9/125μm, SM	1310	Duplex LC	15 dBm
EX-1250TSP-NB6L-A	1000BASE-LX	40KM	9/125μm, SM	1310	Duplex LC	20 dBm
EX-1250TSP-KB8L-A	1000BASE-LX	70KM	9/125μm, SM	1550	Duplex LC	23 dBm
EX-1250TBP-MB1L-A	1000BASE-BX WDM	550M	62.5/125 μm/ 50/125 μm, MM	TX:1310 / RX:1550	Single LC	7 dBm
EX-1250TBP-LB1L-A	1000BASE-BX WDM	550M	62.5/125 μm/ 50/125 μm, MM	TX:1550 / RX:1310	Single LC	7 dBm
EX-1250TBP-MB4L-A	1000BASE-BX WDM	10KM	9/125μm, SM	TX:1310 / RX:1550	Single LC	12 dBm
EX-1250TBP-KB4L-A	1000BASE-BX WDM	10KM	9/125μm, SM	TX:1550 / RX:1310	Single LC	12 dBm
EX-1250TBP-MB5L-A	1000BASE-BX WDM	20KM	9/125μm, SM	TX:1310 / RX:1550	Single LC	15 dBm
EX-1250TBP-KB5L-A	1000BASE-BX WDM	20KM	9/125μm, SM	TX:1550 / RX:1310	Single LC	15 dBm

SFP Fiber Transceivers Specifications

Specifications of Non-Hardened SFP Fiber Transceiver

Model Number	Product Information						
	Connector Type	Wavelength (nm)	Distance	Link Budget	Optical Output Power	Sensitivity	Case Operating Temperature
EXFE-R1S4-05H1	TX	-	100m	-	-	-	
EX-0155NSP-MB2L	Duplex LC	1310	2Km	13 dBm	-19 to -14 dBm	-32 dBm	
EX-0155TSP-MB5L	Duplex LC	1310	15Km	17 dBm	-15 to -8 dBm	-32 dBm	
EX-0155TSP-MB6L	Duplex LC	1310	40Km	29 dBm	-5 to 0 dBm	-34 dBm	
EX38-A3S-TC-N-B3	Single LC	TX:1310 / RX:1550	2Km	18 dBm	-10 to 0 dBm	-28 dBm	
EX48-A3S-TC-N-B5	Single LC	TX:1550 / RX:1310	2Km	18 dBm	-10 to 0 dBm	-28 dBm	
EX-0155TBP-MB5L	Single LC	TX:1310 / RX:1550	20Km	18 dBm	-14 to -8 dBm	-32 dBm	
EX-0155TBP-LB5L	Single LC	TX:1550 / RX:1310	20Km	18 dBm	-14 to -8 dBm	-32 dBm	
EX-0155TBP-MB6L	Single LC	TX:1310 / RX:1550	40Km	26 dBm	-8 to -3 dBm	-34 dBm	
EX-0155TBP-KB6L	Single LC	TX:1550 / RX:1310	40Km	26 dBm	-8 to -3 dBm	-34 dBm	
EX-1250NSP-SB1L	Duplex LC	850	275M (62.5/125 μm)/ 550M (50/125 μm), MM	7.5 dBm	-9.5 to -4 dBm	-17 dBm	
EX-1250TSP-MB2L	Duplex LC	1310	2KM (62.5/125 μm), MM	13.5 dBm	-9.5 to -3 dBm	-23 dBm	
EX-1250TSP-MB4L	Duplex LC	1310	10KM (9/125μm), SM	11.5 dBm	-9.5 to -3 dBm	-21 dBm	
EX-1250TSP-MB5L	Duplex LC	1310	20KM (9/125μm), SM	15 dBm	-9 to -3 dBm	-24 dBm	
EX-1250TSP-NB6L	Duplex LC	1310	40KM (9/125μm), SM	20 dBm	-3 to +2 dBm	-23 dBm	0°C to 70°C (32+°F to 158°F)
EX-1250TSP-KB8L	Duplex LC	1550	70KM (9/125μm), SM	23 dBm	0 to +5 dBm	-23 dBm	
EX-1250TSP-CB8L	Duplex LC	1550	70KM (9/125μm), SM	24 dBm	0 to +5 dBm	-24 dBm	
EX-1250TBP-MB1L	Single LC	TX:1310 / RX:1550	550M (62.5/125 μm), MM	7 dBm	-10 to -4 dBm	-17 dBm	
EX-1250TBP-MB1L	Single LC	TX:1550 / RX:1310	550M (62.5/125 μm), MM	7 dBm	-10 to -4 dBm	-17 dBm	
EX-1250TBP-MB4L	Single LC	TX:1310 / RX:1550	10KM (9/125μm), SM	12 dBm	-9 to -3 dBm	-21 dBm	
EX-1250TBP-KB4L	Single LC	TX:1550 / RX:1310	10KM (9/125μm), SM	12 dBm	-9 to -3 dBm	-21 dBm	
EX-1250TBP-MB5L	Single LC	TX:1310 / RX:1550	20KM (9/125μm), SM	15 dBm	-8 to -3 dBm	-23 dBm	
EX-1250TBP-KB5L	Single LC	TX:1550 / RX:1310	20KM (9/125μm), SM	15 dBm	-8 to -3 dBm	-23 dBm	
EX-1250TBP-NB6L-D	Single LC	TX:1310 / RX:1550	40KM (9/125μm), SM	20 dBm	-3 to +2 dBm	-23 dBm	
EX-1250TBP-KB6L-D	Single LC	TX:1550 / RX:1310	40KM (9/125μm), SM	20 dBm	-3 to +2 dBm	-23 dBm	
EX-1250TBP-NB7L-D	Single LC	TX:1310 / RX:1550	60KM (9/125μm), SM	25 dBm	0 to +5 dBm	-23 dBm	
EX-1250TBP-KB7L-D	Single LC	TX:1550 / RX:1310	60KM (9/125μm), SM	23 dBm	-2 to +3 dBm	-25 dBm	
EX-1250TBP-CB8L-D (1490nm)	Single LC	TX:1490 / RX:1570	80KM (9/125μm), SM	24 dBm	-1 to +4 dBm	-25 dBm	
EX-1250TBP-CB8L-D (1570nm)	Single LC	TX:1570 / RX:1490	80KM (9/125μm), SM	24 dBm	-1 to +4 dBm	-25 dBm	

Specifications of Hardened SFP Fiber Transceiver

Model Number	Product Information						
	Connector Type	Wavelength (nm)	Distance	Link Budget	Optical Output Power	Sensitivity	Case Operating Temperature
EX-0155NSP-MB2L-A	Duplex LC	1310	2Km	13 dBm	-19 to -14 dBm	-32 dBm	
EX-0155TSP-MB5L-A	Duplex LC	1310	15Km	19 dBm	-15 to -8 dBm	-34 dBm	
EX-0155TSP-MB6L-A	Duplex LC	1310	40Km	30 dBm	-5 to 0 dBm	-35 dBm	
EX38-A3S-TI-N-B3	Single LC	TX:1310 / RX:1550	2Km	18 dBm	-10 to 0 dBm	-28 dBm	
EX48-A3S-TI-N-B5	Single LC	TX:1550 / RX:1310	2Km	18 dBm	-10 to 0 dBm	-28 dBm	
EX-0155TBP-MB5L-A	Single LC	TX:1310 / RX:1550	20Km	18 dBm	-14 to -8 dBm	-32 dBm	
EX-0155TBP-LB5L-A	Single LC	TX:1550 / RX:1310	20Km	18 dBm	-14 to -8 dBm	-32 dBm	
EX-0155TBP-MB6L-A	Single LC	TX:1310 / RX:1550	40Km	26 dBm	-8 to -3 dBm	-34 dBm	
EX-0155TBP-KB6L-A	Single LC	TX:1550 / RX:1310	40Km	26 dBm	-8 to -3 dBm	-34 dBm	
EX-1250NSP-SB1L-A	Duplex LC	850	275M (62.5/125 μm)/ 550M (50/125 μm), MM	7.5 dBm	-9.5 to -4 dBm	-17 dBm	
EX-1250TSP-MB2L-A	Duplex LC	1310	2KM (62.5/125 μm), MM	13.5 dBm	-9.5 to -3 dBm	-23 dBm	-40°C to 85°C (-40°F to 185°F)
EX-1250TSP-MB4L-A	Duplex LC	1310	10KM (9/125μm), SM	11.5 dBm	-9.5 to -3 dBm	-21 dBm	
EX-1250TSP-MB5L-A	Duplex LC	1310	20KM (9/125μm), SM	15 dBm	-9 to -3 dBm	-24 dBm	
EX-1250TSP-NB6L-A	Duplex LC	1310	40KM (9/125μm), SM	20 dBm	-3 to +2 dBm	-23 dBm	
EX-1250TSP-KB8L-A	Duplex LC	1550	70KM (9/125μm), SM	23 dBm	0 to +5 dBm	-23 dBm	
EX-1250TBP-MB1L-A	Single LC	TX:1310 / RX:1550	550M (62.5/125 μm), MM	7 dBm	-10 to -4 dBm	-17 dBm	
EX-1250TBP-LB1L-A	Single LC	TX:1550 / RX:1310	550M (62.5/125 μm), MM	7 dBm	-10 to -4 dBm	-17 dBm	
EX-1250TBP-MB4L-A	Single LC	TX:1310 / RX:1550	10KM (9/125μm), SM	12 dBm	-9 to -3 dBm	-21 dBm	
EX-1250TBP-KB4L-A	Single LC	TX:1550 / RX:1310	10KM (9/125μm), SM	12 dBm	-9 to -3 dBm	-21 dBm	
EX-1250TBP-MB5L-A	Single LC	TX:1310 / RX:1550	20KM (9/125μm), SM	15 dBm	-8 to -3 dBm	-23 dBm	
EX-1250TBP-KB5L-A	Single LC	TX:1550 / RX:1310	20KM (9/125μm), SM	15 dBm	-8 to -3 dBm	-23 dBm	

Fiber Optic Transceiver Specifications

Specifications of Non-Hardened SFP Fiber Optic

Designation	Typical Distance	Nominal Wavelength	Cable Type	Connector	Link Budget
100BASE-FX	2Km	1310nm	62.5/125μm, MM	SC	11 dB
100BASE-FX	2Km	1310nm	62.5/125μm, MM	ST	12 dB
100BASE-FX	2Km	TX: 1310nm/RX:1550nm	62.5/125μm, MM	SC	18 dB
100BASE-FX	2Km	TX: 1550nm/RX:1310nm	62.5/125μm, MM	SC	18 dB
100BASE-FX	5Km	TX: 1310nm/RX:1550nm	62.5/125μm, MM	SC	20 dB
100BASE-FX	5Km	TX: 1550nm/RX:1310nm	62.5/125μm, MM	SC	20 dB
100BASE-FX	20Km	1310nm	10/125μm, SM	SC	17 dB
100BASE-FX	20Km	1310nm	10/125μm, SM	ST	17 dB
100BASE-FX	40Km	1310nm	10/125μm, SM	SC	30 dB
100BASE-FX	40Km	1310nm	10/125μm, SM	ST	30 dB
100BASE-FX	75Km	1310nm	10/125μm, SM	SC	34 dB
100BASE-FX	100Km	1550nm	10/125μm, SM	SC	34 dB
100BASE-BX WDM	20Km	TX: 1310nm/RX:1550nm	10/125μm, SM	SC	17 dB
100BASE-BX WDM	20Km	TX: 1550nm/RX:1310nm	10/125μm, SM	SC	17 dB
100BASE-BX WDM	40Km	TX: 1310nm/RX:1550nm	10/125μm, SM	SC	21 dB
100BASE-BX WDM	40Km	TX: 1550nm/RX:1310nm	10/125μm, SM	SC	21 dB
100BASE-SX	220Km	850nm	62.5/125μm, MM	SC	7.5 dB
100BASE-SX	550Km	850nm	50/125μm, MM	SC	7.5 dB
100BASE-SX	2Km	1310nm	62.5/125μm, MM	SC	14 dB
100BASE-LX	10Km	1310nm	10/125μm, MM	SC	14.5 dB
100BASE-LX	20Km	1310nm	10/125μm, MM	SC	17 dB
100BASE-LX	50Km	1310nm	10/125μm, MM	SC	19 dB
1000BASE-BX WDM	20Km	TX: 1310nm/RX:1550nm	10/125μm, SM	SC	12 dB
1000BASE-BX WDM	20Km	TX: 1550nm/RX:1310nm	10/125μm, SM	SC	12 dB
1000BASE-BX WDM	40Km	TX: 1310nm/RX:1550nm	10/125μm, SM	SC	20 dB
1000BASE-BX WDM	40Km	TX: 1550nm/RX:1310nm	10/125μm, SM	SC	20 dB

Specifications of Hardened SFP Fiber Transceiver

Designation	Typical Distance	Nominal Wavelength	Cable Type	Connector	Link Budget
100BASE-FX	2Km	1310nm	62.5/125μm, MM	SC	15 dB
100BASE-FX	2Km	1310nm	62.5/125μm, MM	ST	15 dB
100BASE-FX	2Km	TX: 1310nm/RX:1550nm	62.5/125μm, MM	SC	18 dB
100BASE-FX	2Km	TX: 1550nm/RX:1310nm	62.5/125μm, MM	SC	18 dB
100BASE-FX	5Km	TX: 1310nm/RX:1550nm	62.5/125μm, MM	SC	20 dB
100BASE-FX	5Km	TX: 1550nm/RX:1310nm	62.5/125μm, MM	SC	20 dB
100BASE-FX	20Km	1310nm	10/125μm, SM	SC	19 dB
100BASE-FX	20Km	1310nm	10/125μm, SM	ST	19 dB
100BASE-FX	40Km	1310nm	10/125μm, SM	SC	30 dB
100BASE-FX	40Km	1310nm	10/125μm, SM	ST	30 dB
100BASE-FX	75Km	1310nm	10/125μm, SM	SC	34 dB
100BASE-FX	100Km	1550nm	10/125μm, SM	SC	34 dB
100BASE-BX WDM	20Km	TX: 1310nm/RX:1550nm	10/125μm, SM	SC	19 dB
100BASE-BX WDM	20Km	TX: 1550nm/RX:1310nm	10/125μm, SM	SC	19 dB
100BASE-BX WDM	40Km	TX: 1310nm/RX:1550nm	10/125μm, SM	SC	26 dB
100BASE-BX WDM	40Km	TX: 1550nm/RX:1310nm	10/125μm, SM	SC	26 dB
100BASE-SX	220Km	850nm	62.5/125μm, MM	SC	7.5 dB
100BASE-SX	550Km	850nm	50/125μm, MM	SC	7.5 dB
100BASE-SX	2Km	1310nm	62.5/125μm, MM	SC	14 dB
100BASE-LX	10Km	1310nm	10/125μm, MM	SC	10 dB
100BASE-LX	20Km	1310nm	10/125μm, MM	SC	15 dB
100BASE-LX	50Km	1310nm	10/125μm, MM	SC	20 dB
1000BASE-BX WDM	20Km	TX: 1310nm/RX:1550nm	10/125μm, SM	SC	12 dB
1000BASE-BX WDM	20Km	TX: 1550nm/RX:1310nm	10/125μm, SM	SC	12 dB

RJ50 to DB9 Connection Cables & Antennas

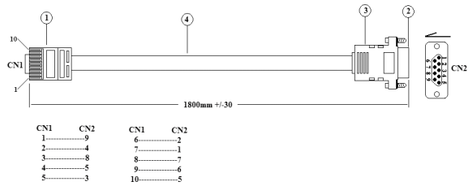
The following cables can be used with SE5304

CS-50F9-180 / CS-50M9-180

Connectors	
Board-side	• 10-pin RJ50 x 1
Device-side	• DB9 female / DB9 male

Specifications	
Cable Length	• 180cm

*RJ50 (10-pin) to DB9(F) Connection Cable / RJ50 (10-pin) to DB9(M) Connection Cable



Pin Assignment

10-Pin	1	2	3	4	5	6	7	8	9	10
8-Pin	-	1	2	3	4	5	6	7	8	-
4-Pin	-	-	-	1	2	3	4	-	-	-
RS-232	RI	DTR	CTS	Signal GND	TxD	RxD	DCD	RTS	DSR	Signal GND
RS-422 4-wir RS-485	-	TxD-	TxD-	Signal GND	RxD+	RxD-	-	-	-	-
2-wire RS-485	-	-	-	Signal GND	D+	D-	-	-	-	-

The following antennas can be used with SW5400

AB94-T

2.4GHz 7dBi SMA Antenna with 200cm cable	
S.W.R.	• <= 2.0 @ 2400-2500 MHz
Antenna Gain	• 7.0 ± 0.7 dBi @ 2450 MHz
Impedance	• 50 ± 3 ohm
Material of Radiator	• Cu (Plated)
Connector(s)	• SMA Male Reverse
Length	• 336 ± 2 mm
Operating Temperature	• -30°C to 85°C (-22°F to 185°F)
Storage Temperature	• -30°C to 85°C (-22°F to 185°F)

AN19

2.4GHz 5dBi SMA Antenna	
S.W.R.	• <= 2.0 @ 2400-2500 MHz
Antenna Gain	• 5.0 ± 0.7 dBi @ 2450 MHz
Impedance	• 50 ± 3 ohm
Material of Radiator	• Cu (Plated)
Connector(s)	• SMA Male Reverse
Length	• 196 ± 2 mm
Operating Temperature	• -30°C to 85°C (-22°F to 185°F)
Storage Temperature	• -30°C to 85°C (-22°F to 185°F)

Product Codes

Hardened Managed Ethernet Switches

Model Name	Description	Ports			Characteristics		Page
		10/100TX	100FX	Gigabit	Temperature	Mounting	
EX77000	24-port FE + 4-port GE Ethernet Switch	24 to 0	0 to 24	0 to 4	-40°C to 75°C	R	15
EX87000	24-port FE + 4-port GE Ethernet Switch (IEC61850)	24 to 0	0 to 24	0 to 4	-40°C to 75°C	R	17
EX89000	24-port FE + 4-port GE Ethernet Switch (IEC61850) (Modulized)	24 to 0	0 to 18	0 to 4	-40°C to 75°C	R	19
EX76000	16-port FE PoE + 2-port GE combo Ethernet Switch	8 to 16	0 to 4	0 to 2	-40°C to 75°C	R	21
EX83000	16-port FE + 2-port GE combo Ethernet Switch (IEC61850)	8 to 16	0 to 4	0 to 2	-40°C to 75°C	D	23
EX73000	16-port FE + 2-port GE combo Ethernet Switch	8 to 16	0 to 4	0 to 2	-40°C to 75°C	D, P	25
EX63000	16-port FE + 2-port GE combo Ethernet Switch	8 to 16	0 to 4	0 to 2	-10°C to 60°C	D, P	27
EX72000	8 to 14 ports FE and 2-port GE Ethernet Switch	8 to 14	0 to 2	0 to 2	-40°C to 75°C	D, P, R	29
EX62000	8 to 14 ports FE and 2-port GE Ethernet Switch	8 to 14	0 to 2	0 to 2	-10°C to 60°C	D, P, R	31
EX71000	8-port FE and 2-port GE Ethernet Switch	4 to 8	0 to 4	0 to 2	-40°C to 75°C	D, P, R	33
EX61000A	8-port FE and 2-port GE Ethernet Switch	4 to 8	0 to 4	0 to 2	-10°C to 60°C	D, P, R	35
EX78000	10-port FE PoE + 2-port GE Ethernet Switch	4 to 8	0 to 4	0 to 2	-40°C to 75°C	D, P	37
EX65000	8-port GE Ethernet Switch	--	--	8	-20°C to 60°C	D, P	39
EX74000	6-port FE PoE + 2-port SFP (DDM) GE combo Ethernet Switch	6	--	2	-40°C to 75°C	P, R	41

Hardened Unmanaged Ethernet Switches

Model Name	Description	Ports			Characteristics		Page
		10/100TX	100FX	Gigabit	Temperature	Mounting	
EX95000	16-port FE Ethernet Switch	14 to 16	0 to 2	--	-40°C to 75°C	D, P, R	43
EX33000	16-port FE Ethernet Switch	14 to 16	0 to 2	--	-10°C to 60°C	D, P, R	45
EX47000	8-port FE Ethernet Switch (IEC61850)	4 to 8	0 to 2	--	-40°C to 75°C	D, P	47
EX94000	5/8-port FE Ethernet Switch	4 to 8	0 to 4	--	-40°C to 75°C	D, P	49
EX35000	8-port GE Ethernet Switch	--	--	8	-20°C to 60°C	D, P	51
EX49000	16-port FE PoE + 2-port GE Ethernet Switch (Web-Smart)	8 to 16	--	2	-40°C to 75°C	R	53
EX49000A	16-port FE PoE + 2-port GE Ethernet Switch	8 to 16	--	2	-40°C to 75°C	R	55
EX46100	8-port FE High Power PoE Ethernet Switch (Web-Smart)	6 to 8	0 to 2	--	-40°C to 75°C	D, P, R	57
EX36100	8-port FE High Power PoE Ethernet Switch (Web-Smart)	6 to 8	0 to 2	--	-10°C to 60°C	D, P, R	59
EX48000	5-port FE PoE Ethernet Switch (Web-Smart)	4 to 5	0 to 1	--	-40°C to 75°C	K, W	61
EX38000	5-port FE PoE Ethernet Switch (Web-Smart)	4 to 5	0 to 1	--	-10°C to 60°C	K, W	63
EX48000A	5-port FE PoE Ethernet Switch	4 to 5	0 to 1	--	-40°C to 75°C	K, W	65
EX38000A	5-port FE PoE Ethernet Switch	4 to 5	0 to 1	--	-10°C to 60°C	K, W	67
EX46000	8-port FE PoE Ethernet Switch (Web-Smart)	6 to 8	0 to 2	--	-40°C to 75°C	D, P, R	69
EX36000	8-port FE PoE Ethernet Switch (Web-Smart)	6 to 8	0 to 2	--	-10°C to 60°C	D, P, R	71
EX45000	8-port FE PoE Ethernet Switch	6 to 8	0 to 2	--	-40°C to 75°C	D, P, R	73
EX34000	8-port FE PoE Ethernet Switch	6 to 8	0 to 2	--	-10°C to 60°C	D, P, R	75
EX43000	8-port FE Ethernet Switch	4 to 8	0 to 4	--	-20°C to 60°C	D, P, R	77
EX42000	5-port FE Ethernet Switch	1 to 5	0 to 1	--	-10°C to 60°C	D	79

Non-Hardened Managed Ethernet Switches

Model Name	Description	Ports			Characteristics		Page
		10/100TX	100FX	Gigabit	Temperature	Mounting	
EX27000	24-port FE + 4-port GE Ethernet Switch	24 to 0	0 to 24	0 to 4	-10°C to 60°C	R	81
EX29000	24-port FE + 4-port GE Ethernet Switch (IEC61850) (Modulized)	24 to 0	0 to 18	0 to 4	-10°C to 60°C	R	83
EX26604L	24-port FE PoE + 2-port GE ports RJ45 and 2-port GE Ethernet Switch	24	--	4	0°C to 45°C	R	85

Non-Hardened Unmanaged Ethernet Switches

Model Name	Description	Ports			Characteristics		Page
		10/100TX	100FX	Gigabit	Temperature	Mounting	
EX17242	24-port PoE FE-TX + 2-port combo GE SFP Ethernet Switch	24	--	2	0°C to 45°C	R	87
EX17016	16-port PoE FE-TX Ethernet Switch	16	--	--	0°C to 45°C	R	89
EX17008	8-port PoE FE-TX Ethernet Switch	8	--	--	0°C to 45°C	K, R	91
EX17008A	8-port PoE FE-TX Ethernet Switch	8	--	--	0°C to 45°C	K, R	93
EX1608SF	8-port FE Ethernet Switch	0 to 8	0 to 8	--	0°C to 45°C	R	95
EX1605B/BF1	5-port FE Ethernet Switch	4 to 5	0 or 1	--	0°C to 45°C	R, W	97
EX1608B/BF1	8-port FE Ethernet Switch	7 to 8	0 or 1	--	0°C to 45°C	R, W	97
EX1605PB/PBF1	5-port FE-TX Ethernet Switch	5	--	--	0°C to 45°C	W, S	99
EX1608PB/PBF1	8-port FE-TX Ethernet Switch	8	--	--	0°C to 45°C	W, S	99
EX1605PE	5-port FE-TX Ethernet Switch	5	0 or 1	--	0°C to 45°C	K	101
EX1608PE	8-port FE-TX Ethernet Switch	8	0 or 1	--	0°C to 45°C	K	101
EX16TX	16-port FE-TX Ethernet Switch	16	--	--	0°C to 45°C	R	103
EX24TX	24-port FE-TX Ethernet Switch	24	--	--	0°C to 45°C	R	103
EX1616W	16-port FE-TX + 1-port 100BASE-FX Ethernet Switch (Web-Smart)	16	0 or 1	--	0°C to 45°C	R	105
EX1624W	24-port FE-TX + 1-port 100BASE-FX Ethernet Switch (Web-Smart)	24	0 or 1	--	0°C to 45°C	R	105
EX1616G4M	16-port GE + 4-port SFP Ethernet Switch	--	--	16	0°C to 45°C	R	107
EX1624G4M	24-port GE + 4-port SFP Ethernet Switch	--	--	24	0°C to 45°C	R	107

*All models with -40°C to 75°C Operating Temperature are tested at -40°C to 85°C

*Mounting Type: D-DIN Rail, K-Desktop, P-Panel Mount, R-Rack Mount, W-Wall Mount, S-Shelf Mount

Product Codes

Gigabit Media Converters

Model Name	Description	Ports			Characteristics		Page
		10/100TX	100FX	Gigabit	Temperature	Mounting	
EL9100	Hardened GE Media Converter	--	--	2	-40°C to 75°C	D, P, R	117
EL9000	Hardened GE Media Converter	--	--	2	-40°C to 75°C	D, P, R	119
EL9020	Hardened GE SFP Media Converter	--	--	2	-40°C to 75°C	D, P, R	121
EL2326	GE Dual Rate Media Converter	--	--	2	-5°C to 55°C	W	123
EM1100	GE Media Converter	--	--	2	0°C to 45°C	C, W	125
EM2100	GE WDM Media Converter	--	--	2	0°C to 45°C	C, W	125
EM1000S	GE Media Converter	--	--	2	0°C to 45°C	C, W	127
EM2000S	GE WDM Media Converter	--	--	2	0°C to 45°C	C, W	127
EM1000	GE Media Converter	--	--	2	0°C to 45°C	C, W	129
EM2000	GE WDM Media Converter	--	--	2	0°C to 45°C	C, W	129
EL2315	GE Dual Rate SFP Media Converter	--	--	2	0°C to 50°C	C, W	131
EM1020	GE SFP Media Converter	--	--	2	0°C to 45°C	C, W	133

Fast Ethernet Converters

Model Name	Description	Ports			Characteristics		Page
		10/100TX	100FX	Gigabit	Temperature	Mounting	
EL1141	Hardened FE Media Converter	1	1	--	-40°C to 75°C	D, P, R	135
EL900	Hardened FE Media Converter	1	1	--	-40°C to 75°C	D, P, R	137
EX42011	Industrial FE Media Converter	1	1	--	-10°C to 60°C	D	139
EL1032	Industrial FE Media Converter with PoE/PSE	1	1	--	-10°C to 60°C	D, P, R	141
EL1033	Industrial FE Media Converter with PoE/PD	1	1	--	-10°C to 60°C	D, P, R	143
EL150A	OAM CPE Managed FE Media Converter	1	1	--	0°C to 45°C	K	145
EL150	Managed FE Media Converter	1	1	--	0°C to 45°C	K	147
EM120	FE Media Converter	--	2	--	0°C to 45°C	C, W	149
EL100	FE Media Converter	1	1	--	0°C to 45°C	C, W	151
EL200	FE WDM Media Converter	1	1	--	0°C to 45°C	C, W	153
EL50	FE Media Converter	1	1	--	0°C to 45°C	W	155
EN303	32bit PCI-Bus FE Media Converter	1	1	--	0°C to 45°C	-	157

Multiple Channel / Media Converter Systems

Model Name	Description	Ports			Characteristics		Page
		10/100TX	100FX	Gigabit	Temperature	Mounting	
EMC1600	16-Bay Media Converter and Ethernet Extender Chassis	0 to 16	0 to 32	0 to 32	0°C to 45°C	R	159
EMC1200R	12-Bay Media Converter System	0 to 12	0 to 24	0 to 24	0°C to 45°C	R	161
EMMC800M	8-Bay Managed Media Converter Chassis System	0 to 8	0 to 8	--	0°C to 45°C	R	163
EX1605PBF1	FE Media Converter	4	1	--	0°C to 45°C	W	167
WA4281	Hardened IP68 Dual Radio Multi-function PoE Wireless Device	2	--	--	-30°C to 80°C	P	169
WA4271	Industrial IP65 Dual Radio Multi-function PoE Wireless Device	2	--	--	-20°C to 70°C	P	171
WA4184	Hardened IP66 Outdoor Wireless Access Point	1	--	--	-30°C to 70°C	P	173

*All models with -40°C to 75°C Operating Temperature are tested at -40°C to 85°C

*Mounting Type: C-Chassis Supported, D-DIN Rail, K-Desktop, P-Panel Mount, R-Rack Mount, W-Wall Mount

Product Codes

Ethernet Extenders over Copper Wire

Model Name	Description	Ports			Characteristics		Page
		10/100TX	100FX	VDSL	Temperature	Mounting	
ED3175	Managed Hardened 8-Port FE Switch + 2 Extender ports	8	--	2	-40°C to 75°C	D, P, R	181
ED3146	Hardened 4-port FE PoE Ethernet Extender	4	--	1	-40°C to 75°C	D, P, R	183
ED3145	Hardened 4-port FE Ethernet Extender	4	--	1	-40°C to 75°C	D, P, R	185
ED3171	Managed Hardened FE Ethernet Extender	1	--	1	-40°C to 75°C	D, P, R	187
ED3142	Hardened FE PoE Ethernet Extender	1	--	1	-40°C to 75°C	D, P, R	189
ED3141	Hardened FE Ethernet Extender	1	--	1	-40°C to 75°C	D, P, R	191
ED3101	Industrial FE Ethernet Extender	1	--	1	-20°C to 60°C	D, W	193
ED3021	SNMP Managed SHDSL Ethernet Extender	1	--	1	0°C to 50°C	--	195
ED3011	Managed SHDSL Ethernet Extender	2	--	1	0°C to 50°C	--	197

Ethernet Extenders over Coaxial Cable

Model Name	Description	Ports			Characteristics		Page
		10/100TX	100FX	VDSL	Temperature	Mounting	
ED3371	Managed Hardened FE Ethernet Extender	1	--	1	-40°C to 75°C	D, P, R	199
ED3341	Hardened FE Ethernet Extender	1	--	1	-40°C to 70°C	D, P, R	201
ED3344	Hardened FE M12 Ethernet Extender	1	--	1	-40°C to 75°C	D, P, R	203
ED3331	Industrial FE Ethernet Extender	1	--	1	-10°C to 60°C	D, W	205

Serial to Ethernet Solutions

Model Name	Description	Ports			Characteristics		Page
		10/100TX	100FX	Serial	Temperature	Mounting	
FT5702	Industrial 2-port Serial Self-Healing Ring Fiber Modem	0 to 2	0 to 2	2	-10°C to 60°C	D, P, W	211
SE6300	Hardened 2/4-port Serial Device Server	0 to 2	0 to 2	2 to 4	-25°C to 70°C	D, P, W	213
SE5300	Industrial 2/4-port Serial Device Server	0 to 2	0 to 2	2 to 4	-10°C to 60°C	D, P, W	215
SE6100	Hardened 1-port Serial Device Server	0 or 1	0 or 1	1	-34°C to 75°C	D, P, W	217
SE5100	Industrial 1-port Serial Device Server	0 or 1	0 or 1	1	-10°C to 60°C	D, P, W	219
TS900	Hardened 1-port Serial Device Server	0 or 1	0 or 1	1	-40°C to 75°C	D, W	221
SW5400	Industrial 1-port Serial to Wireless Device Server	1	--	1	-10°C to 60°C	D, P, W	223

*All models with -40°C to 75°C Operating Temperature are tested at -40°C to 85°C

*Mounting Type: C-Chassis Supported, D-DIN Rail, K-Desktop, P-Panel Mount, R-Rack Mount, W-Wall Mount

Product Codes

NIC Cards

Model Name	Description	Ports			Characteristics		Page
		10/100TX	100FX	Gigabit	Temperature	Installation	
GE3000	PCI Express GE Ethernet Adapter	--	--	1	0°C to 45°C	PCI Express	231
EN301	32bit PCI-Bus 100BASE-FX Ethernet Adapter	--	1	--	0°C to 45°C	PCI	233

Industrial Power Supplies

Model Name	Description	Ports			Characteristics		Page
		Watts	Voltage	Amphere	Temperature	Mounting	
DD-85-48	85W/1.78A 48VDC Industrial Power Supply	85W	48VDC	1.78A	-10°C to 60°C	D, P	235
DD-85-55	85W/1.55A 55VDC Industrial Power Supply	85W	55VDC	1.55A	-10°C to 60°C	D, P	236
DR-30-24	30W/1.5A DIN-Rail 24VDC Industrial Power Supply	36W	24VDC	1.5A	-20°C to 60°C	D	237
DR-60-24	60W/2.5A DIN-Rail 24VDC Industrial Power Supply	60W	24VDC	2.5A	-20°C to 60°C	D	237
DR-75-24	75W/3.2A DIN-Rail 24VDC Industrial Power Supply	75W	24VDC	3.2A	-10°C to 60°C	D	238
DR-120-24	120W/5A DIN-Rail 24VDC Industrial Power Supply	120W	24VDC	5A	-10°C to 60°C	D	238
DR-75-48	75W/1.6A DIN-Rail 48VDC Industrial Power Supply	75W	48VDC	1.6A	-10°C to 60°C	D	239
DR-120-48	120W/2.5A DIN-Rail 48VDC Industrial Power Supply	120W	48VDC	2.5A	-10°C to 60°C	D	239
DR-240-48	240W/5A DIN-Rail 48VDC Industrial Power Supply	240W	48VDC	5A	-25°C to 70°C	D	240
SDR-480-48	480W/10A DIN-Rail 48VDC Industrial Power Supply	480W	48VDC	10A	-25°C to 70°C	D	240

Power Adapters

Model Name	Description	Ports			Characteristics		Page
		Watts	Voltage	Amphere	Temperature	Mounting	
MDR-40-48	40W/0.83A 48VDC Industrial Power Supply	40W	48VDC	0.3A	-20°C to 70°C	D	241
AS-120P-48	120W/2.5A 48VDC Power Adapter	120W	48VDC	2.5A	0°C to 50°C	--	241
41-136040	36W/3A 12VDC Hardened Power Adapter	36W	12VDC	3A	-40°C to 75°C	--	242
41-136041	36W/3A 12VDC Hardened Power Adapter	36W	12VDC	3A	-40°C to 75°C	--	242
41-136042	36W/3A 12VDC Hardened Power Adapter	36W	12VDC	3A	-40°C to 75°C	--	243
41-136043	36W/3A 12VDC Hardened Power Adapter	36W	12VDC	3A	-40°C to 75°C	P, W	243
41-136044	75W/1.6A DIN-Rail 48VDC Industrial Power Supply	36W	12VDC	3A	-40°C to 75°C	P, W	244
41-136046	36W/3A 12VDC Hardened Power Adapter	36W	12VDC	3A	-40°C to 75°C	P, W	244

*All models with -40°C to 75°C Operating Temperature are tested at -40°C to 85°C

*Mounting Type: D-DIN Rail, K-Desktop, P-Panel Mount, R-Rack Mount, W-Wall Mount