IKS-6726-8PoE Series

24+2G-port Gigabit modular PoE managed Ethernet switches

- Supports up to a total of 240 W by smart PoE power management
- Meets UL 60950-1 and EN 50121-4 certifications
- Turbo Ring and Turbo Chain (recovery time < 20 ms @ 250 switches), RSTP/STP, and MSTP for network redundancy
- TACACS+, SNMPv3, IEEE 802.1X, HTTPS, and SSH to enhance network security
- Easy network management by web browser, CLI, Telnet/serial console, Windows utility, and ABC-01
- Modular design lets you choose from a variety of media combinations
- -40 to 75°C operating temperature range

Introduction

The IKS-6726-8PoE series of industrial rackmount Ethernet switches are designed to meet the demands of mission critical applications for business and industry, such as power automation and critical facility surveillance. The IKS-6726-8PoE comes standard with 8 10/100BaseT(X) ports and 8 10/100BaseT(X) 802.3af (PoE) compliant Ethernet ports. The IKS-6726-8PoE Ethernet switches provide two kinds of power input source: 48 VDC and 110/220 VDC/VAC. The IKS-6726-8PoE supports up to a total of 240 W PoE power supply. With a limit of 240 W, the IKS-6726-8PoE models can supply power to up to 16 PoE ports. The switches support advanced management and security features, and are designed especially for security automation applications such as IP surveillance and gate of entry systems, which can benefit from a scalable backbone construction and Power-over-Ethernet support. In addition, the modular design of the IKS-6726-8PoE makes network planning easy, and allows greater flexibility by letting you install up to 16 PoE ports, 2 Gigabit ports, and 24 fast Ethernet ports.

Features and Benefits

- Advanced PoE management function
- IEEE 802.3af-compliant PoE and Ethernet combo ports
- IPv6 Ready logo awarded (IPv6 Logo Committee certified)
- Command Line Interface (CLI) for quickly configuring major managed functions
- IPv6 Ready logo awarded (IPv6 Logo Committee certified)
- IEEE 1588 PTP V2 (Precision Time Protocol) for precise time synchronization of networks
- DHCP Option 82 for IP address assignment with different policies
- Support EtherNet/IP and Modbus/TCP protocols for device management and monitoring
- Compatible with EtherNet/IP and PROFINET protocols for transparent data transmission
- Turbo Ring and Turbo Chain (recovery time < 20 ms @ 250 switches), RSTP/STP, and MSTP for network redundancy
- IGMP snooping and GMRP for filtering multicast traffic
- Port-based VLAN, IEEE 802.1Q VLAN, and GVRP to ease network planning
- QoS (IEEE 802.1p/1Q and TOS/DiffServ) to increase determinism
- IEEE 802.3ad, LACP for optimum bandwidth utilization
- TACACS+, SNMPv3, IEEE 802.1X, HTTPS, and SSH to enhance network security
- SNMPv1/v2c/v3 for different levels of network management
- RMON for efficient network monitoring and proactive capability
- Bandwidth management to prevent unpredictable network status
- "Lock port" to restrict access to authorized MAC addresses
- Port mirroring for online debugging
- Automatic warning by exception through email, relay output
- Automatic recovery of connected device's IP addresses
- Line-swap fast recovery
- Configurable by Web browser, Telnet/serial console, CLI, Windows utility, and ABC-01 automatic backup configurator

Specifications

Technology

Standards:

IEEE 802.3af for Power-over-Ethernet
IEEE 802.3 for 10BaseT
IEEE 802.3u for 100BaseT(X) and 100BaseFX
IEEE 802.3ab for 1000BaseT(X)
IEEE 802.3z for 1000BaseX
IEEE 802.3x for Flow Control
IEEE 802.1D-2004 for Spanning Tree Protocol
IEEE 802.1w for Rapid STP

IKS-6726-8PoE Modular Rackmount Ethernet Switch System

IEEE 802.1s for Multiple Spanning Tree Protocol
IEEE 802.1Q for VLAN Tagging
IEEE 802.1p for Class of Service
IEEE 802.1X for Authentication
IEEE 802.3ad for Port Trunk with LACP
Protocols: IGMPv1/v2, GMRP, GVRP, SNMPv1/v2c/v3, DHCP Server/Client, BootP, TFTP, SNTP, SMTP, RARP, RMON, HTTP, HTTPS, Telnet, SSH, Syslog, DHCP Option 66/67/82, EtherNet/IP, Modbus/TCP, LLDP, IEEE 1588 PTP V2, IPv6, NTP Server/Client
MIB: MIB-II, Ethernet-like MIB, P-BRIDGE MIB, Q-BRIDGE MIB, Bridge MIB, RSTP MIB, RMON MIB Group 1, 2, 3, 9
Flow Control: IEEE 802.3x flow control, back pressure flow control

Switch Properties

Priority Queues: 4
Max. Number of Available VLANs: 64
VLAN ID Range: VID 1 to 4094
IGMP Groups: 256
MAC Table Size: 8 K
Packet Buffer Size: 2 Mbit

Interface

Fast Ethernet: Slot 1 for any combination of 4, 6, 7, or 8-port PM-7200 Fast Ethernet modules with 10/100BaseT(X) (TP/PoE/M12 interface), 100BaseFX (SC/ST connector), or 100BaseSFP
Gigabit Ethernet: Slot 2 for 2-port PM-7200 Gigabit Ethernet combo module with 10/100/1000BaseT(X) or 1000BaseSFP ports
Note: See page 2-44 for PM-7200 Gigabit and Fast Ethernet module product information.
Console Port: RS-232 (RJ45 connector)
System LED Indicators: STAT, PWR1, PWR2, FAULT, MSTR/HEAD, CPLR/TAIL
Mode LED Indicators: LNK/ACT, FDX/HDX, RING PORT, COUPLER PORT, SPEED, PoE on module
Alarm Contact: 1 relay output with current carrying capacity of 3 A @ 30 VDC or 3 A @ 240 VAC

Power Requirements

Input Voltage: 48 VDC (44 to 57 V) or 110/220 VDC/VAC (88 to 300 VDC, 85 to 264 VAC)
Input Current:
Max. 1.5/0.75 A @ 110/220 VDC (with 8 fully loaded PoE ports)
Max. 1.6/0.8 A @ 110/220 VAC (with 8 fully loaded PoE ports)
Max. 5.73 A @ 48 VDC (with 16 fully loaded PoE ports)
Max. PoE Power Supply:
IKS-6726-8PoE-48-T:
Max. 15.4 W per PoE port
Max. 240 W total for PoE power supply
IKS-6726-8PoE-HV-T:
Max. 15.4 W per PoE port
Max. 120 W total for PoE power supply
Overload Current Protection: Present
Connection: 10-contact terminal block
Reverse Polarity Protection: Present

Physical Characteristics

Housing: IP30 protection
Dimensions: 440 x 44 x 325 mm (17.32 x 1.73 x 12.80 in)
Weight:
IKS-6726-8PoE-F-48-T: 4260 g
IKS-6726-8PoE-F-48-48-T: 4460 g
IKS-6726-8PoE-F-HV-T: 6100 g
IKS-6726-8PoE-F-HV-HV-T: 6500 g
Installation: 19" rack mounting

Environmental Limits

Operating Temperature: -40 to 75°C (-40 to 167°F)
Storage Temperature: -40 to 85°C (-40 to 185°F)
Ambient Relative Humidity: 5 to 95% (non-condensing)

Standards and Certifications

Safety: UL 60950-1
EMI: FCC Part 15 Subpart B Class A, EN 55022 Class A
EMS:
EN 61000-4-2 (ESD) Level 3, EN 61000-4-3 (RS) Level 3, EN 61000-4-4 (EFT) Level 3, EN 61000-4-5 (Surge) Level 3, EN 61000-4-6 (CS) Level 3, EN 61000-4-8
Rail Traffic: EN 50121-4
Note: Please check Moxa's website for the most up-to-date certification status.

MTBF (mean time between failures)

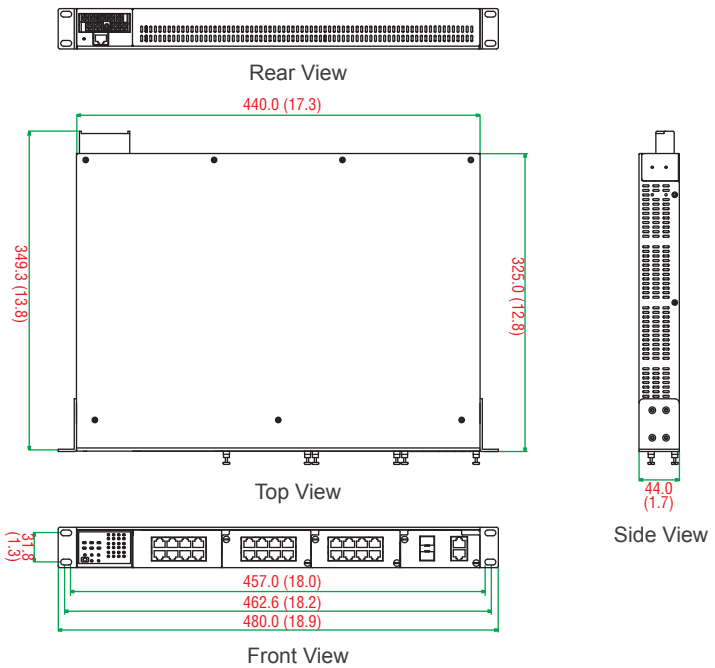
Time: 176,000 hrs
Database: Telcordia (Bellcore), GB

Warranty

Warranty Period: 5 years
Details: See www.moxa.com/warranty

Dimensions

Unit: mm (inch)



Ordering Information

Step 1: Select Ethernet switch system **Step 2: Select interface modules**

IKS-6726-8PoE with power supply → PM-7200 series (Gigabit or Fast Ethernet)

Note: The IKS-6726-8PoE Ethernet switch system is delivered without interface modules. Please see page 2-44 to determine which PM-7200 interface modules are suitable for your application.

IKS-6726-8PoE Modular Rackmount Ethernet Switch System

Modular managed rackmount Ethernet switch system with 8 10/100BaseT(X) ports and 8 10/100BaseT(X) PoE ports, 1 slot for Fast Ethernet modules, and 1 slot for Gigabit Ethernet modules. Supports up to 24+2G ports and up to 16 PoE ports, -40 to 75°C operating temperature

Available Models	Power Supply			
Front Cabling, Front Display	Isolated Power Supply 1		Isolated Power Supply 2	
	48 VDC (44 to 57 V)	HV: 88 to 300 VDC and 85 to 264 VAC	48 VDC (44 to 57 V)	HV: 88 to 300 VDC and 85 to 264 VAC
IKS-6726-8PoE-F-48-T	1	–	–	–
IKS-6726-8PoE-F-48-48-T	1	–	1	–
IKS-6726-8PoE-F-HV-T	–	1	–	–
IKS-6726-8PoE-F-HV-HV-T	–	1	–	1

Note:
1. The IKS-6726-8PoE-48 supports a total PoE power supply of 240 watts.
2. The IKS-6726-8PoE-HV supports a total PoE power supply of 120 watts.
3. PoE Pinout: V-, V-, V+, V+ for Pin 1, 2, 3, 6 (Endspan, MDI-X Alternative A)

Gigabit/Fast Ethernet Module Compatibility Chart for the IKS-6726-8PoE

	Interface Module																	
	PM-7200-2GTXSFP	PM-7200-8TX	PM-7200-2MSC4TX	PM-7200-2MST4TX	PM-7200-2SSC4TX	PM-7200-4MSC2TX	PM-7200-4MST2TX	PM-7200-4SSC2TX	PM-7200-6MSC	PM-7200-6MST	PM-7200-6SSC	PM-7200-1LSC6TX	PM-7200-1MST6TX	PM-7200-1SSC6TX	PM-7200-1MSC6TX	PM-7200-8PoE	PM-7200-8SFP	PM-7200-4M12
Slot 1	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Slot 2	✓	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–

Optional Accessories (can be purchased separately)

DR-75-48/120-48: 75/120 W DIN-Rail 48 VDC power supplies
DRP-240-48: 240 W DIN-Rail 48 VDC power supplies
MXview: Moxa industrial network management software with 50, 100, 250, 500, 1000, or 2000 nodes
EDS-SNMP OPC Server Pro: OPC server software that works with all SNMP devices
ABC-01: Configuration backup and restoration tool for managed Ethernet switches, 0 to 60°C operating temperature

Package Checklist

- IKS-6726-8PoE switch
- RJ45 to DB9 console port cable
- Protective caps for unused ports
- 2 rackmount ears
- Documentation and software CD
- Hardware installation guide (printed)
- Warranty card

PM-7200 Series

Gigabit and Fast Ethernet modules for PT and IKS series rackmount Ethernet switches

Specifications

Gigabit Ethernet Interface Modules, PM-7200-2G/4G Series


PM-7200-4GTXSFP


PM-7200-2GTXSFP

Interface

RJ45 Ports: 10/100/1000BaseT(X) auto negotiation speed, and auto MDI/MDI-X connection

Fiber Ports: 1000BaseSFP slots

Note: The PM-7200-2G/4G series Gigabit Ethernet combo modules support 2 or 4 SFP slots. See the SFP-1G series Gigabit Ethernet information below to select the modules for your application.

Fast Ethernet Interface Modules, PM-7200 Series


PM-7200-8TX


PM-7200-6MSC
PM-7200-6SSC


PM-7200-6MST


PM-7200-4MSC2TX
PM-7200-4SSC2TX


PM-7200-4MST2TX


PM-7200-2MSC4TX
PM-7200-2SSC4TX


PM-7200-2MST4TX


PM-7200-1LSC6TX


PM-7200-2MSC
PM-7200-2SSC

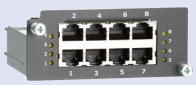

PM-7200-2MST


PM-7200-1MSC
PM-7200-1SSC


PM-7200-1MST


PM-7200-1MST6TX


PM-7200-1MSC6TX
PM-7200-1SSC6TX


PM-7200-8PoE


PM-7200-8SFP*


PM-7200-4M12


PM-7200-2MTRJ


PM-7200-8MTRJ


PM-7200-4MST-FL


PM-7200-4TX-PTP


PM-7200-4MSC-PTP


PM-7200-4MST-PTP


PM-7200-1BNC2MST-PTP

*See the SFP-1G/1FE series Gigabit Ethernet and Fast Ethernet information below to select modules for your system.

Interface

RJ45 Ports: 10/100BaseT(X) auto negotiation speed, F/H duplex mode, and auto MDI/MDI-X connection
Fiber Ports: 100BaseFX ports (SC/ST/MTRJ or SFP LC connector)
PoE Ports: IEEE 802.3af Power-over-Ethernet Technology, provide up to 15.4 watts per port
M12 Ports: 10/100BaseT(X) auto negotiation speed, and auto MDI/MDI-X connection
BNC Ports: Time clock signal PPS (pulses per second) output for IEEE 1588 time synchronization

Optical Fiber

	100BaseFX			10BaseFX
	Multi-mode	Single-mode	Single-mode, 80 km	Multi-mode
Wavelength	1300 nm	1310 nm	1550 nm	1300 nm
Max. TX	-10 dBm	0 dBm	0 dBm	-10 dBm
Min. TX	-20 dBm	-5 dBm	-5 dBm	-20 dBm
RX Sensitivity	-32 dBm	-34 dBm	-34 dBm	-32 dBm
Link Budget	12 dB	29 dB	29 dB	12 dB
Typical Distance	5 km [a] 4 km [b]	40 km [c]	80 km [d]	5 km [a] 4 km [b]
Saturation	-6 dBm	-3 dBm	-3 dBm	-6 dBm

a. 50/125 µm, 800 MHz*km fiber optic cable
b. 62.5/125 µm, 500 MHz*km fiber optic cable
c. 9/125 µm single-mode fiber optic cable
d. 9/125 µm single-mode fiber optic cable (80 km)

Ordering Information

Rackmount Ethernet Switch System and Interface Module Compatibility Chart

Modular Rackmount Ethernet Switch System:

PT-7828/PT-7728-PTP/ PT-7728

PT-7710

IKS-6726-8PoE

IKS-6324

		IEEE 1588 Interface Modules				Interface Modules																							
		PM-7200-4TX-PTP	PM-7200-4MSC-PTP	PM-7200-4MST-PTP	PM-7200-1BNC2MST-PTP	PM-7200-4GTXSFP	PM-7200-2GTXSFP	PM-7200-1MSC/2MSC	PM-7200-1MST/2MST	PM-7200-1SSC/2SSC	PM-7200-8TX	PM-7200-2MSC4TX	PM-7200-2MST4TX	PM-7200-2SSC4TX	PM-7200-4MSC2TX	PM-7200-4MST2TX	PM-7200-4SSC2TX	PM-7200-6MSC	PM-7200-6MST	PM-7200-6SSC	PM-7200-1MSC6TX	PM-7200-1MST6TX	PM-7200-1SSC6TX	PM-7200-1LSC6TX	PM-7200-8PoE	PM-7200-8SFP*	PM-7200-4M12	PM-7200-2MTRJ	PM-7200-8MTRJ	PM-7200-4MST-FL
PT-7828 PT-7728	Slots 1-3	–	–	–	–	–	–	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	–	✓	✓	✓	✓	✓
	Slot 4	–	–	–	–	✓	✓	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
PT-7728-PTP	Slots 1-3	✓	✓	✓	–	–	–	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	–	✓	✓	✓	✓	✓
	Slot 4	–	–	–	✓	✓	✓	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
PT-7710	Slot 1	–	–	–	–	–	–	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	–	✓	✓	✓	✓	✓
	Slot 2	–	–	–	–	–	✓	✓	✓	✓	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
IKS-6726-8PoE	Slot 1	–	–	–	–	–	–	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	–	–	–
	Slot 2	–	–	–	–	–	✓	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
IKS-6324	Slot 1	–	–	–	–	–	✓	✓	✓	✓	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–

Gigabit Ethernet Modules, PM-7200-2G/4G Series

Available Models	Port Interface
	Combo Port, 10/100/1000BaseT(X) or 1000BaseSFP*
PM-7200-2GTXSFP	2
PM-7200-4GTXSFP	4

*The PM-7200-2G/4G series Gigabit Ethernet combo modules support 2 or 4 SFP slots.

Fast Ethernet Modules, PM-7200/7500 Series

Available Models	Port Interface									
	10/100BaseT(X)			100BaseFX					100BaseSFP	PPS output, BNC connector
	TP	PoE	M12	Multi-mode, SC Connector	Multi-mode, ST Connector	Multi-mode, MTRJ Connector	Single-mode, SC Connector	Single-mode, SC Connector, 80 km		
PM-7200-8TX	8	–	–	–	–	–	–	–	–	–
PM-7200-6MSC	–	–	–	6	–	–	–	–	–	–
PM-7200-6MST	–	–	–	–	6	–	–	–	–	–
PM-7200-6SSC	–	–	–	–	–	–	6	–	–	–
PM-7200-4MSC2TX	2	–	–	4	–	–	–	–	–	–
PM-7200-4MST2TX	2	–	–	–	4	–	–	–	–	–
PM-7200-4SSC2TX	2	–	–	–	–	–	4	–	–	–
PM-7200-2MSC4TX	4	–	–	2	–	–	–	–	–	–
PM-7200-2MST4TX	4	–	–	–	2	–	–	–	–	–
PM-7200-2SSC4TX	4	–	–	–	–	–	2	–	–	–
PM-7200-1LSC6TX	6	–	–	–	–	–	–	1	–	–
PM-7200-2MSC	–	–	–	2	–	–	–	–	–	–
PM-7200-2MST	–	–	–	–	2	–	–	–	–	–
PM-7200-2SSC	–	–	–	–	–	–	2	–	–	–
PM-7200-1MSC	–	–	–	1	–	–	–	–	–	–
PM-7200-1MST	–	–	–	–	1	–	–	–	–	–
PM-7200-1SSC	–	–	–	–	–	–	1	–	–	–
PM-7200-1MSC6TX	6	–	–	1	–	–	–	–	–	–
PM-7200-1MST6TX	6	–	–	–	1	–	–	–	–	–
PM-7200-1SSC6TX	6	–	–	–	–	–	1	–	–	–
PM-7200-8SFP	–	–	–	–	–	–	–	–	8	–
PM-7200-4M12	–	–	4	–	–	–	–	–	–	–
PM-7200-2MTRJ	–	–	–	–	–	2	–	–	–	–
PM-7200-8MTRJ	–	–	–	–	–	8	–	–	–	–
PM-7200-4MST-FL	–	–	–	–	4	–	–	–	–	–
PM-7200-4TX-PTP	4	–	–	–	–	–	–	–	–	–
PM-7200-4MSC-PTP	–	–	–	4	–	–	–	–	–	–
PM-7200-4MST-PTP	–	–	–	–	4	–	–	–	–	–
PM-7200-1BNC2MST-PTP	–	–	–	–	2	–	–	–	–	1
PM-7200-8PoE	–	8	–	–	–	–	–	–	–	–

Package Checklist

- PM-7200 interface modules
- Warranty card

SFP-1G Series

1-port Gigabit Ethernet SFP modules

- IEEE 802.3z compliant
- Differential LVPECL inputs and outputs
- TTL signal detect indicator
- Hot pluggable LC duplex connector
- Class 1 laser product, complies with EN 60825-1

Specifications

Interface

Ethernet Ports: 1
Connectors: Duplex LC Connector or Simplex LC Connector (WDM-type only)
Note: WDM-type SFP modules must be used in pairs (e.g., SFP-1GXXALC and SFP-1GXXBLC)
Note: When connecting long distance SFP (SFP-ZX, EZX or EZX-120), please ensure at least 5 dB attenuation between both ends. Without attenuation, excessive optical power may damage the transeivers.

Optical Fiber

	Gigabit Ethernet													
	SFP-SX	SFP-LSX	SFP-LX	SFP-LH	SFP-LHX	SFP-ZX	SFP-EZX	SFP-EZX-120	SFP-10A	SFP-10B	SFP-20A	SFP-20B	SFP-40A	SFP-40B
Wavelength	850 nm	1310 nm	1310 nm	1310 nm	1310 nm	1550 nm	1550 nm	1550 nm	TX 1310 nm, RX 1550 nm	TX 1550 nm, RX 1310 nm	TX 1310 nm, RX 1550 nm	TX 1550 nm, RX 1310 nm	TX 1310 nm, RX 1550 nm	TX 1550 nm, RX 1310 nm
Max. TX	-4 dBm	-1 dBm	-3 dBm	-2 dBm	1 dBm	5 dBm	5 dBm	3 dBm	-3 dBm		-2 dBm		2 dBm	
Min. TX	-9.5 dBm	-9 dBm	-9.5 dBm	-8 dBm	-4 dBm	0 dBm	0 dBm	-2 dBm	-9 dBm		-8 dBm		-3 dBm	
RX Sensitivity	-18 dBm	-19 dBm	-20 dBm	-23 dBm	-24 dBm	-24 dBm	-30 dBm	-33 dBm	-21 dBm		-23 dBm		-23 dBm	
Link Budget	8.5 dB	10 dB	10.5 dB	15 dB	20 dB	24 dB	30 dB	31 dB	12 dB		15 dB		20 dB	
Typical Distance	550 m[a]	2 km[b]	10 km[c]	30 km[c]	40 km[c]	80 km[c]	110 km[c]	120 km[c]	10 km[c]		20 km[c]		40 km[c]	
Saturation	0 dBm	-3 dBm	-3 dBm	-3 dBm	-3 dBm	-3 dBm	-3 dBm	-8 dBm	-1 dBm		-1 dBm		-1 dBm	

a. 50/125 µm, 400 MHz * km or 62.5/125 µm, 500 MHz * km @ 850 nm multi-mode fiber optic cable
b. 62.5/125 µm, 750 MHz * km @ 1310 nm multi-mode fiber optic cable
c. 9/125 µm single-mode fiber optic cable

Note: The actual communication distance depends on many factors, including connector loss, cable deployment, and the age of the cabling system. We recommend doing a link budget analysis and reserving a 3 dB margin for such factors.

Environmental Limits

Operating Temperature:
Standard Models: 0 to 60°C (32 to 140°F)
Wide Temp. Models: -40 to 85°C (-40 to 185°F)
Storage Temperature: -40 to 85°C (-40 to 185°F)
Ambient Relative Humidity: 5 to 95% (non-condensing)

Standards and Certifications

Safety: UL 60950-1, TÜV

Warranty

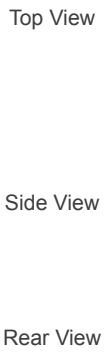
Warranty Period: 5 years
Details: See www.moxa.com/warranty

Dimensions

Unit: mm (inch)

SFP-1G Series

SFP-1G Series (WDM Type)



Ordering Information

SFP Modules

Available Models		Port Interface							
Standard Temperature (0 to 60˚C)	Wide Temperature (-40 to 85˚C)	1000BaseSX, LC Connector, 0.5 km	1000BaseLSX, LC Connector, 2 km	1000BaseLX, LC Connector, 10 km	1000BaseLH, LC Connector, 30 km	1000BaseLHX, LC Connector, 40 km	1000BaseZX, LC Connector, 80 km	1000BaseEZX, LC Connector, 110 km	1000BaseEZX, LC Connector, 120 km
SFP-1GSXLC	SFP-1GSXLC-T*	1	–	–	–	–	–	–	–
SFP-1GLSXLC	SFP-1GLSXLC-T	–	1	–	–	–	–	–	–
SFP-1GLXLC	SFP-1GLXLC-T	–	–	1	–	–	–	–	–
SFP-1GLHLC	SFP-1GLHLC-T	–	–	–	1	–	–	–	–
SFP-1GLHXLC	SFP-1GLHXLC-T	–	–	–	–	1	–	–	–
SFP-1GZXLC	SFP-1GZXLC-T	–	–	–	–	–	1	–	–
SFP-1GEZXLC	–	–	–	–	–	–	–	1	–
SFP-1GEZXLC-120	–	–	–	–	–	–	–	–	1

* SFP-1GSXLC-T: -20 to 75˚C operating temperature

WDM-type (BiDi) SFP Modules

Availabe Models		Port Interface					
Standard Temperature (0 to 60˚C)	Wide Temperature (-40 to 85˚C)	1000BaseSFP, LC Connector, 10 km		1000BaseSFP, LC Connector, 20 km		1000BaseSFP, LC Connector, 40 km	
		TX 1310 nm, RX 1550 nm	TX 1550 nm, RX 1310 nm	TX 1310 nm, RX 1550 nm	TX 1550 nm, RX 1310 nm	TX 1310 nm, RX 1550 nm	TX 1550 nm, RX 1310 nm
SFP-1G10ALC	SFP-1G10ALC-T	1	–	–	–	–	–
SFP-1G10BLC	SFP-1G10BLC-T	–	1	–	–	–	–
SFP-1G20ALC	SFP-1G20ALC-T	–	–	1	–	–	–
SFP-1G20BLC	SFP-1G20BLC-T	–	–	–	1	–	–
SFP-1G40ALC	SFP-1G40ALC-T	–	–	–	–	1	–
SFP-1G40BLC	SFP-1G40BLC-T	–	–	–	–	–	1

Available Models

The SFP-1G series modules can be used with the following products:
ICS-G7826/G7828 series, ICS-G7526/G7528 series, IKS-G6524/G6824 series, IKS-6726/6728 series, EDS-611/619 series, EDS-G509 series, EDS-518A series, EDS-510A series, EDS-G308 series, EDS-P510 series, EDS-G205-4PoE series, IM-G7000-4GSFP, IM-2GSFP, PM-7200-2G/4G series, PT-G7509, EDR-G903/G902 series, IMC-101G series

Package Checklist

- SFP-1G module
- Warranty card

SFP-1FE Series

1-port fast Ethernet SFP modules

- IEEE 802.3u compliant
- Differential PECL inputs and outputs
- TTL signal detect indicator
- Hot pluggable LC duplex connector
- Class 1 laser product; complies with EN 60825-1

Specifications

Interface

Ethernet Ports: 1
Connectors: Duplex LC Connector

Optical Fiber

	Fast Ethernet		
	SFP-M	SFP-S	SFP-L
Wavelength	1300 nm	1310 nm	1550 nm
Max. TX	-18 dBm	0 dBm	0 dBm
Min. TX	-8 dBm	-5 dBm	-5 dBm
RX Sensitivity	-34 dBm	-34 dBm	-34 dBm
Link Budget	26 dB	29 dB	29 dB
Typical Distance	4 km [a]	40 km [b]	80 km [b]
Saturation	0 dBm	-3 dBm	-3 dBm

a. 50/125 µm or 62.5/125 µm, 800 MHz * km @ 1300 nm multi-mode fiber optic cable
b. 9/125 µm single-mode fiber optic cable

Environmental Limits

Operating Temperature: -40 to 85°C (-40 to 185°F)
Storage Temperature: -40 to 85°C (-40 to 185°F)
Ambient Relative Humidity: 5 to 95% (non-condensing)

Standards and Certifications

Safety: UL 60950-1, TÜV

Warranty

Warranty Period: 5 years
Details: See www.moxa.com/warranty

Dimensions

Unit: mm (inch)

Top View

Side View

Rear View

Ordering Information

Available Models	Port Interface		
Wide Temperature (-40 to 85°C)	100BaseFX, Multi-mode, LC Connector, 4 km	100BaseFX, Single-mode, LC Connector, 40 km	100BaseFX, Single-mode, LC Connector, 80 km
SFP-1FEMLC-T	1	–	–
SFP-1FESLC-T	–	1	–
SFP-1FELLC-T	–	–	1

Available Models

The SFP-1FE series modules can be used with the following products:
ICS-G7826/G7828 series, ICS-G7526/G7528 series, IKS-G6524/G6824 series, IKS-6726/6728 series, EDS-611/619 series, EDS-G509 series, EDS-G308-2SFP, EDS-P510 series, IM-G7000-4GSFP, PM-7200-8SFP, EDR-G903/G902 series, IM-6700-8SFP

Package Checklist

- SFP-1FE module
- Warranty card