IKS-6726-PoE Series

24+2G-port IEEE 802.3af PoE Gigabit modular managed Ethernet switches

- Provides 15.4 W (per port) to up to 16 PoE ports when 48 VDC power is applied
- Supports a total of 120 W for smart PoE power management when HV power is applied
- PoE and Ethernet combo module supported, IEEE 802.3af-compliant
- Meets UL 60950-1, NEMA TS2, EN50155/EN50121-4, and DNV/GL certifications
- Turbo Ring and RSTP/STP for Ethernet Redundancy
- Modular design lets you choose from a variety of media combinations
- -40 to 75°C operating temperature range

The certification logos shown here apply to some or all of the products in this section. For details, see "Regulatory Approvals" under "Specifications" below.

Introduction

The IKS-6726-PoE series of industrial rackmount Ethernet switches are designed to meet the demands of mission critical applications for business and industry, such as traffic control systems (NEMA TS2), power automation, and critical facility surveillance. The IKS-6726-PoE comes standard with up to 16 10/100BaseT(X) 802.3af (PoE) compliant Ethernet ports and 2 combo Gigabit Ethernet ports. The IKS-6726-PoE Ethernet switches provide two kinds of power input source: 48 VDC and 110/220 VDC/VAC. The IKS-6726-PoE 48 VDC model supports up to 15.4 watts of power per PoE port, and allows power to be supplied to connected devices when AC power is not readily available or is cost-prohibitive to provide locally. The IKS-6726-PoE HV model supports a total of 120 W for smart PoE power management when HV power is applied. When supplied with 120 W of power, the IKS-6726-PoE HV model can supply power to up to 16 PoE ports. The switches support a variety of management functions, including Turbo Ring, RSTP/STP, IGMP, VLAN, QoS, RMON, bandwidth management, and port mirroring, 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.

Features and Benefits

- Advanced PoE management function
- IEEE 802.3af-compliant PoE and Ethernet combo ports
- IPv6 Ready logo awarded (IPv6 Logo Committee certified)
- IEEE 1588 PTP (Precision Time Protocol) for precise time synchronization of networks
- DHCP Option 82 for IP address assignment with different policies
- Modbus/TCP industrial Ethernet protocol supported
- IEC 61850 GOOSE messaging compliance
- Turbo Ring and RSTP/STP (IEEE 802.1w/D) supported
- IGMP snooping and GMRP for filtering multicast traffic from industrial Ethernet protocols
- IEEE 802.1Q VLAN and GVRP protocols to ease network planning
- QoS (IEEE 802.1p/1Q and TOS/DiffServ) to increase determinism
- IEEE 802.3ad, LACP for optimum bandwidth utilization
- 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 with "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, 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 100Base FX
IEEE 802.3ab for 1000BaseT(X)
IEEE 802.3z for 1000BaseSX/LX/LHX/ZX
IEEE 802.3x for Flow Control
IEEE 802.1D for Spanning Tree Protocol
IEEE 802.1w for Rapid STP
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

IKS-6726-PoE Modular Rackmount Ethernet Switch System

Protocols: IGMPv1/v2 device, GMRP, GVRP, SNMPv1/v2c/v3, DHCP Server/Client, DHCP Option 66/67/82, BootP, TFTP, SNTP, SMTP, RARP, RMON, HTTP, HTTPS, Telnet, SSH, Syslog, Modbus/TCP, LLDP, IEEE 1588 PTP, IPv6

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

Interface

Fast Ethernet: Slots 1 and 2 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 3 for 2-port PM-7200 Gigabit Ethernet combo module with 10/100/1000BaseT(X) or 1000BaseSFP ports

Console Port: RS-232 (RJ45 connector)

System LED Indicators: STAT, PWR1, PWR2, FAULT, MASTER, COUPLER

Module 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: 24 VDC (18 to 36 V), 48 VDC (36 to 72 V), or 110/220 VDC/VAC (88 to 300 VDC, 85 to 264 VAC)

Input Current:

- Max. 5.8 A @ 48 VDC (supports up to 16 ports at 15.4 W per PoE port)
- Max. 1.85/0.94 A @ 110/220 VDC (120 W total for PoE ports)
- Max. 1.54/0.78 A @ 110/220 VAC (120 W total for PoE ports)

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: 4200 g

Installation: 19" rack mounting

Environmental Limits

Operating Temperature: -40 to 75°C (-40 to 167°F), cold start requires min. of 100 VAC at -40°C

Storage Temperature: -40 to 85°C (-40 to 185°F)

Ambient Relative Humidity: 5 to 95% (non-condensing)

Regulatory Approvals

Safety: UL60950-1, CSA C22.2 No. 60950-1, EN60950-1 (Pending)

EMI: FCC Part 15, CISPR (EN55022) class A

Maritime: DNV (Pending), GL (Pending)

Traffic Control: NEMA TS2

Rail Traffic: EN50155/EN50121-4

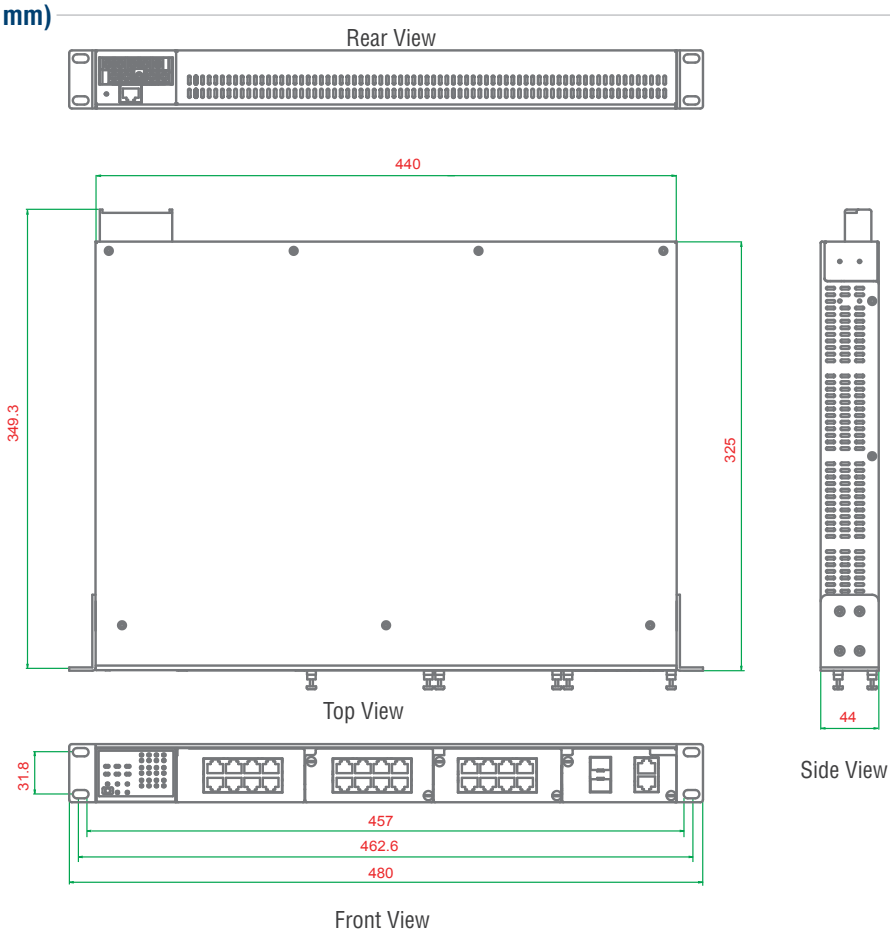
Note: Please check Moxa's website for the most up-to-date certification status.

Warranty

Warranty Period: 5 years

Details: See www.moxa.com/warranty

Dimensions (unit = mm)



Ordering Information

Step 1: Select Ethernet switch system

IKS-6726-PoE with power supply

Step 2: Select interface modules

PM-7200 series
(Gigabit or fast Ethernet)

Note: The IKS-6726-PoE Ethernet switch system is delivered without interface modules. Please see page 4-31 to determine which PM-7200 interface modules are suitable for your application.

IKS-6726-PoE Modular Rackmount Ethernet Switch System

Modular managed rackmount Ethernet switch system with 8 10/100BaseT(X) ports, 2 slots for fast Ethernet modules (PoE), 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 (36 to 72 V)	HV: 88 to 300 VDC and 85 to 264 VAC	48 VDC (36 to 72 V)	HV: 88 to 300 VDC and 85 to 264 VAC
IKS-6726-PoE-F-48-T	1	---	---	---
IKS-6726-PoE-F-48-48-T	1	---	1	---
IKS-6726-PoE-F-48-HV-T	1	---	---	1
IKS-6726-PoE-F-HV-T	---	1	---	---
IKS-6726-PoE-F-HV-HV-T	---	1	---	1

Note: The HV power module supplies a total of 30 W to the system and 120 W for PoE power management.

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

	Interface Module																								
	PM-7200-4GTXSFP	PM-7200-2GTXSFP	PM-7200-1MSC	PM-7200-1MST	PM-7200-2MSC	PM-7200-2MST	PM-7200-1SSC	PM-7200-2SSC	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-7200-1LSC6TX	PM-7200-1MST6TX	PM-7200-1SSC6TX	PM-7200-1MSC6TX	PM-7200-8PoE	PM-7200-8SFP	PM-7200-4M12
Slot 1	---	---	---	---	---	---	---	---	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
Slot 2	---	---	---	---	---	---	---	---	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
Slot 3	---	√	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Optional Accessories (can be purchased separately)

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