IKS-6726-8PoE Series

Hardware Installation Guide

Third Edition, July 2011

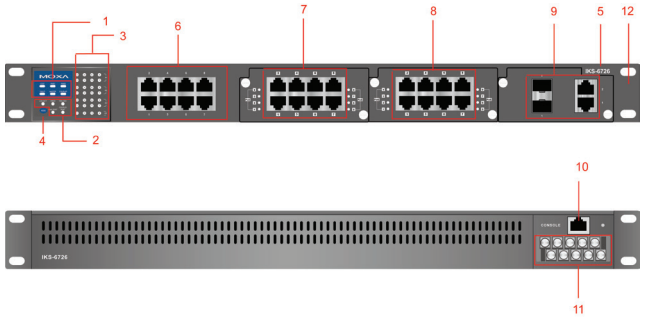
Package Checklist

The Moxa IKS-6726-8PoE series industrial rackmount switches are shipped with the following items. If any of these items are missing or damaged, please contact your customer service representative for assistance.

- 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

Physical Appearance

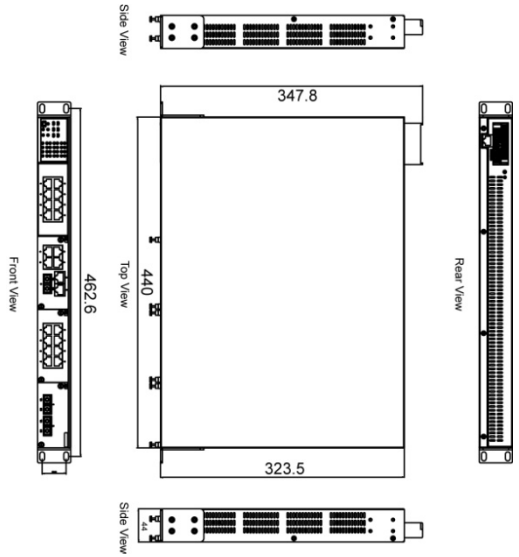
Panel Layouts



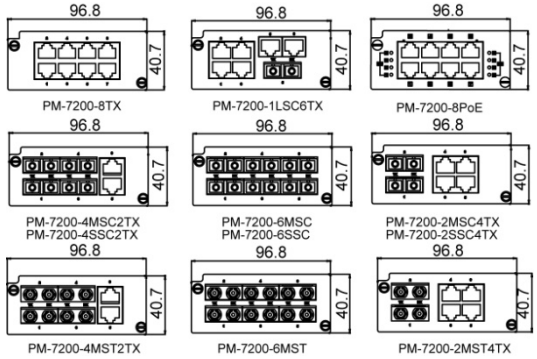
1. System status LEDs
2. Mode LEDs for the interface module
3. Port LEDs for the interface module
4. Push-button switch for selecting the mode of the interface module
5. Model name
6. 10/100BaseT(X) port
7. 10/100BaseT(X) PoE port
8. Fast Ethernet / PoE interface module
9. Gigabit Ethernet interface module
10. Serial console port
11. 10-pin terminal block for power inputs and relay output
12. Rack mounting brackets

P/N: 1802067260022

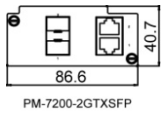
Dimensions (unit=mm)



Fast Ethernet, PoE Interface Modules (for slot 1)

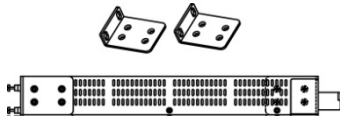


Gigabit Ethernet Interface Modules (for slot 2)



Rack Mounting

Use four screws to attach the switch to a standard rack.



Wiring Requirements

WARNING

Be sure to disconnect the power cord before installing and/or wiring your Moxa industrial rackmount switch.

Calculate the maximum possible current in each power wire and common wire. Observe all electrical codes dictating the maximum current allowable for each wire size.

If the current goes above the maximum ratings, the wiring could overheat, causing serious damage to your equipment.

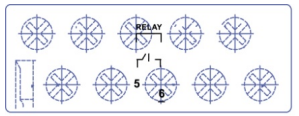
Grounding the Rackmount Switch

Grounding and wire routing help limit the effects of noise due to electromagnetic interference (EMI). Run the ground connection from the ground screw to the grounding surface prior to connecting devices.

Wiring the Power Inputs

The IKS series switches support dual redundant power supplies: *Power Supply 1 (PWR1)* and *Power Supply 2 (PWR2)*. The connections for PWR1, PWR2, and the RELAY are located on the terminal block. The front view of the terminal block connectors is shown below.

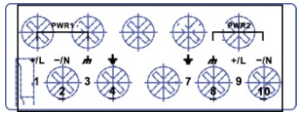
Wiring the Relay Contact



Each IKS switch has one relay output. Refer to the next section for detailed instructions on how to connect the wires to the terminal block connector, and how to attach the terminal block connector to the terminal block receptor.

FAULT: The relay contacts of the 10-pin terminal block connector are used to detect user-configured events. The two wires attached to the RELAY contacts form an open circuit when a user-configured event is triggered. If a user-configured event does not occur, the RELAY circuit will be closed.

Wiring the Redundant Power Inputs



Each IKS switch has two sets of power inputs: power input 1 and power input 2.

STEP 1: Insert the dual set positive/negative DC wires into PWR1 and PWR2 terminals (+ → pins 1, 9; - → pins 2, 10), or insert the L/N AC wires into PWR1 and PWR2 terminals (L → pin 1, 9; N → pin 2,10).

STEP 2: Use a screwdriver to tighten the wire-clamp screws on the front of the terminal block connector.

LED Indicators

System LEDs

STAT		
GREEN	On	System has passed self-diagnosis test on boot-up and is ready to run.
	Blinking	System is undergoing the self-diagnosis test.
RED	On	System failed self-diagnosis on boot-up.
PWR1		
AMBER	On	Power is being supplied to the main module's power input PWR1.
	Off	Power is not being supplied to the main module's power input PWR1.
PWR2		
AMBER	On	Power is being supplied to the main module's power input PWR2.
	Off	Power is not being supplied to the main module's power input PWR2.
FAULT		
RED	On	The corresponding PORT alarm is enabled and a user-configured event has been triggered.
	Off	The corresponding PORT alarm is enabled and a user-configured event has not been triggered, or the corresponding PORT alarm is disabled.
MSTR/HEAD		
GREEN	On	This IKS switch is the Master of this Turbo Ring or the Head of this Turbo Chain.
	Blinking	This IKS switch has become Ring Master of this Turbo Ring after the Turbo Ring was broken, or Chain Head of this Turbo Chain after the Turbo Chain was broken..
	Off	This IKS switch is neither the Master of this Turbo Ring nor the Head of this Turbo Chain.
CPLR/TAIL		
GREEN	On	When this IKS switch enables the coupling or tailing function to form a back-up path.
	Off	When this IKS switch disables the coupling and tailing function.

Mode LEDs

LNK/ACT		
GREEN	On	The corresponding module port's link is active.
	Blinking	The corresponding module port's data is being transmitted.
	Off	The corresponding module port's link is inactive.
SPEED		
GREEN	Off	The corresponding module port's data is being transmitted at 10 Mbps.
	On	The corresponding module port's data is being transmitted at 100 Mbps.
	Blinking	The corresponding module port's data is being transmitted at 1000 Mbps.
FDX/HDX		
GREEN	On	The corresponding module port's data is being transmitted in full duplex mode.
	Off	The corresponding module port's data is being transmitted in half duplex mode.
RING PORT		
GREEN	On	The corresponding module's port is the ring port of this IKS switch.
	Off	The corresponding module's port is not the ring port of this IKS switch.
COUPLER PORT		
GREEN	On	The corresponding module's port is the coupler port of this IKS switch.
	Off	The corresponding module's port is not the coupler port of this IKS switch.

PoE Module LEDs

POE		
AMBER	On	The corresponding port is supplying power
	Off	The corresponding port is not supplying power

Specifications

Technology	
Standards	IEEE 802.3, 802.3u, 802.3ab, 802.3z, 802.3x, 802.1D, 802.1W, 802.1Q, 802.1p, 802.1X, 802.3ad
Flow control	IEEE 802.3x flow control, back pressure flow control
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), 1000Base SFP slots (SFP slot, LC connector)
Alarm Contact	One relay output with current carrying capacity of 3A @ 30 VDC or 3A @ 240 VAC
Optical Fiber (100BaseFX)	
Distance	Multi-mode 0 to 5 km, 1300 nm (50/125μm, 800 MHz*km) 0 to 4 km, 1300 nm (62.5/125μm, 500 MHz*km)
	Single-mode 0 to 40 km, 1310 nm (9/125μm, 3.5 PS/(nm*km))
Min. TX Output	Multi-mode: -20 dBm; single-mode: -5 dbm
Max. TX Output	Multi-mode: -10 dBm; single-mode: 0 dbm
RX Sensitivity	Multi-mode: -32 dBm; single-mode: -34 dbm
Power	
Input Voltage	48 VDC (44 to 57V) 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 Output	IKS-6726-8PoE-48-T: Max.15.4 W per PoE port Max. 240 W total for PoE output IKS-6726-8PoE-HV-T: Max.15.4 W per PoE port Max. 120 W total for PoE output
Physical Characteristics	
Housing	IP 30 protection, metal case
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
Regulatory Approvals	
Safety	EN 60950-1 (Pending)
Road Traffic	NEMA TS2 (Pending)
Rail Traffic	EN 50121-4 (Pending)
EMI	FCC Part 15 Subpart B Class A, EN 55022 Class A
Environmental Limits	
Operating Temp.	-40 to 75°C (-40 to 167°F)
Storage Temp.	-40 to 85°C (-40 to 185°F)
Ambient Relative Humidity.	5 to 95% (non-condensing)
Warranty	
Warranty Period	5 years
Details	See www.moxa.com/warranty

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www.moxa.com/support

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