Industrial Rackmount Switch
IKS-6324 Series
Hardware Installation Guide

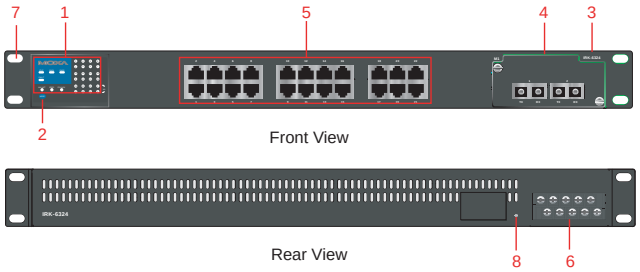
Second Edition, June 2008

Package Checklist

The Moxa IKS-6324 Series industrial rackmount switches are shipped with the following items. If any of these items is missing or damaged, please contact your customer service representative for assistance.

- 1 Moxa IKS-6324 Switch
- Hardware Installation Guide
- Moxa Product Warranty Statement
- Protective caps for unused ports
- 2 rack-mount ears

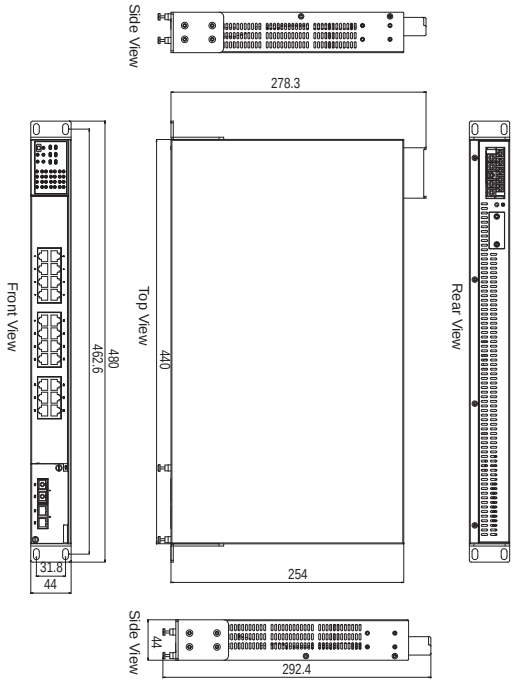
Panel Layouts



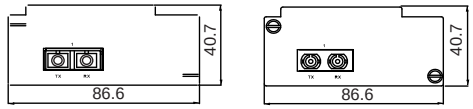
1. LED Indicators (System status, Interface Module mode, Interface Module port)
2. Push-button switch to select mode for Interface Module
3. Model Name
4. Fast Ethernet / Gigabit Ethernet Interface Modules
5. 10/100BaseT(X) port
6. 10-pin terminal block for power inputs
7. Rack Mounting Kit
8. Ground Screw

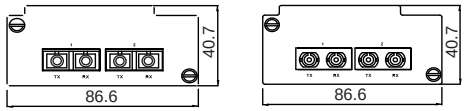
P/N: 1802063240011

Dimensions (unit = mm)

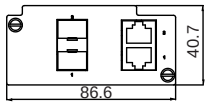


Fast Ethernet Interface Module





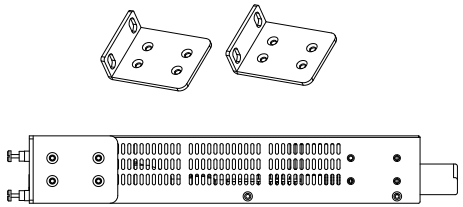
Gigabit Ethernet Interface Module



Slot 1 for 2-port PM-7200 Gigabit Ethernet combo module, or 2- or 1-port PM-7200 fast Ethernet modules.

Rack Mounting

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



Wiring Requirements

WARNING

Safety First!

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 Moxa's Rackmount Switches

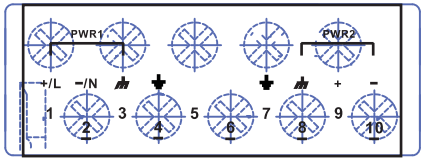
Grounding and wire routing help limit the effects of noise due to electromagnetic interference (EMI). Run the ground connection from the ground screw to the grounding surface prior to connecting devices.

ATTENTION

This product is intended to be mounted to a well-grounded mounting surface, such as a metal panel.

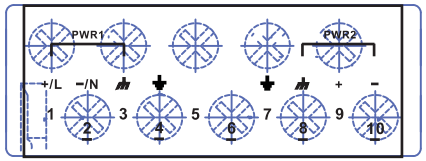
Wiring the Power Inputs

The IKS series supports dual redundant power supplies, named "Power Supply 1 (PWR1)" and "Power Supply 2 (PWR2)". The connections for PWR1 and PWR2 are located on the terminal block. Front view of the terminal block connectors are shown here.



Wiring the Redundant Power Inputs

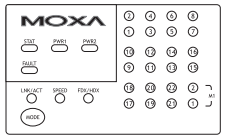
The IKS-6324 switch has two sets of power input—power input 1 and power input 2.



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 the PWR1 terminals (L → pin 1, N → pin 2).

STEP 2: To keep the DC or AC wires from pulling loose, use a screwdriver to tighten the wire-clamp screws on the front of the terminal block connector.

LED Indicators



The front panel of the IKS-6324 switch contains several LED indicators. The function of each LED is described in the table below.

LED	Color	State	Description
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	System initiation has failed.
		Off	System initiation was successful.

Note: Use the Mode push-button switch to cycle among the LNK/ACT, SPEED, and FDX/HDX LEDs. The status of these three settings is indicated by the LEDs for the various ports. The system will switch to LNK/ACT automatically after 5 seconds.

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 at full duplex.
		Off	The corresponding module port's data is being transmitted at half duplex mode.

* Slot 1 (M1) is mainly used for Gigabit modules. If 100BaseFX modules are used in Slot 1 (M1), the modules will not support "Far End Fault". The Link/ACT LED indicator will stay at "Green (ON)" status when Fiber TX cable is unplugged.

Specifications

Technology

Standards	IEEE802.3, 802.3u, 802.3ab, 802.3z, 802.3x
Flow Control	IEEE802.3x flow control, back pressure flow control

Interface

Fast Ethernet	10/100BaseT(X) or 100BaseFX (SC/ST connector)
Gigabit Ethernet	10/100/1000BaseT(X), 1000BaseSX/LX/LHX/ZX (SFP slot, LC connector)
System LED Indicators	STAT, PWR1, PWR2, FAULT
Module LED Indicators	LNK/ACT, FDX/HDX, SPEED

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	-36 to -32 dBm (Single), -34 to -30 dBm (Multi)

Power

Input Voltage	Low Voltage: 24/48 VDC (9 to 60 V) High Voltage: 110/250 VDC (88 to 300 V) and 100/240 VAC (85 to 264 V)
Input Current	Max. 0.68A @ 24 VDC Max. 0.35A @ 48 VDC Max. 0.17/0.11A @ 110/220 VDC Max. 0.33/0.23A @ 110/220 VAC
Connection	10-pin Terminal Block
Overload Current Protection	6.3 A
Reverse Polarity Protection	Present

Mechanical

Casing	IP 30 protection, metal case
Dimensions (W x H x D)	440 x 44 x 254 mm (17.32 x 1.73 x 10.00 in.)
Weight	4300g
Installation	19-inch Rack Mounting

Environmental

Operating Temp.	-40 to 75°C (-40 to 167°F) for -T models
Storage Temp.	-40 to 85°C (-40 to 185°F)
Ambient Relative Humidity	5 to 95% (non-condensing)

Regulatory Approvals

Safety:	EN60950-1 (Pending)
Maritime:	ABS/BV/CCS/DNV/GL/KR/LR/NKK/PR/RINA (Pending)
Road Traffic:	NEMA TS2 (Pending)
EMI:	FCC Part 15, CISPR (EN55022) class A
Railway	EN50121-4 (Pending)
Shock & Vibration	EN50155 (EN/IEC 61373, Category 1, Class B)
Warranty	5 years

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