Industrial Rackmount Switch
IKS-6500 Series
Hardware Installation Guide

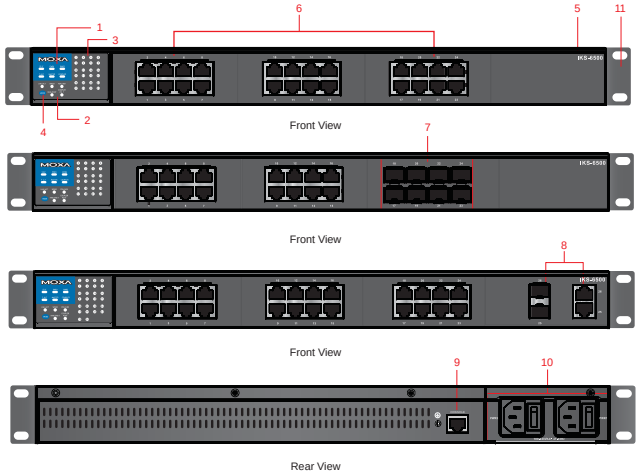
First Edition, November 2009

Package Checklist

The Moxa IKS-6500 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.

- 1 Moxa IKS-6500 Series Switch
- Hardware Installation Guide
- CD-ROM with User's Manual and SNMP MIB file
- Moxa Product Warranty Statement
- RJ45 to DB9 console port cable
- Protective caps for unused ports
- 2 rack-mount ears

Panel Layouts

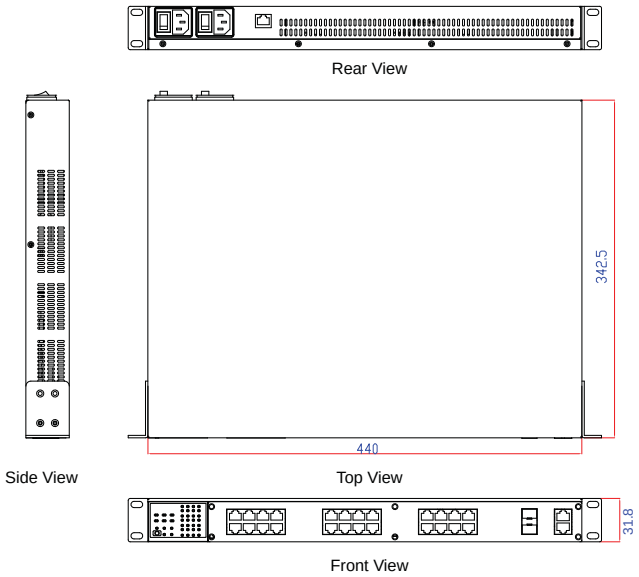


1. System status LEDs
2. Mode LEDs
3. Ports status LEDs
4. Push-button to select mode for all ports
5. Model Name
6. 10/100BaseT(X) port

P/N: 1802065000010

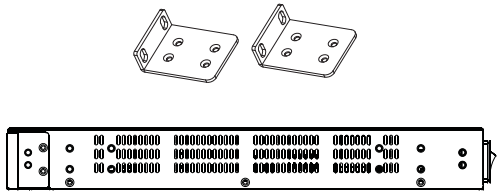
7. 100BaseSFP slot
8. Gigabit Ethernet port
9. Serial Console port
10. AC power sockets for power inputs
11. Rack Mounting Kit

Dimensions (unit = mm)



Rack Mounting

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

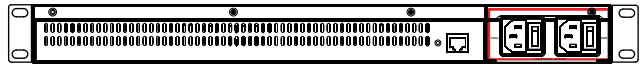


Grounding the Moxa Industrial Rackmount Switch

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.

Connecting the Power Inputs

The IKS-6500 series of switches supports up to dual redundant power supplies: *Power Supply 1 (PWR1)* and *Power Supply 2 (PWR2)*. The connections for PWR1 and PWR2 are located on the rear side (shown below). Be sure to use a standard power cord with an IEC C13 connector, which is compatible with the AC power inlet.



LED Indicators

The front panel of the IKS-6500 Series 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 is in the event of failure, or is under quick inspection.
		Off	System is in normal operation.
MSTR/ HEAD	GREEN	On	When the IKS-6500 is set as the Master of the Turbo Ring, or as the Head of the Turbo Chain.
		Blinking	The IKS-6500 has become the Ring Master of the Turbo Ring, or the Head of the Turbo Chain, after the Turbo Ring or the Turbo Chain is down.
CPLR/ TAIL	GREEN	On	When the IKS-6500 coupling function is enabled to form a back-up path, or when it's set as the Tail of the Turbo Chain.
		Blinking	When the Turbo Chain is down
		Off	When this IKS-6500 switch disables the coupling function.

Mode LEDs			
LNK/ACT	GREEN	On	The corresponding port's link is active.
		Blinking	The corresponding port's data is being transmitted.
		Off	The corresponding port's link is inactive.
SPEED	GREEN	Off	The corresponding port's data is being transmitted at 10 Mbps.
		On	The corresponding port's data is being transmitted at 100 Mbps.
		Blinking	The corresponding port's data is being transmitted at 1000 Mbps.
FDX/HDX	GREEN	On	The corresponding port's data is being transmitted in full duplex mode.
		Off	The corresponding port's data is being transmitted in half duplex mode.
RING PORT	GREEN	On	The corresponding port is the ring port of this IKS-6500 switch.
		Off	The corresponding port is not the ring port of this IKS-6500 switch.
COUPLER PORT	GREEN	On	The corresponding port is the coupler port of this IKS-6500 switch.
		Off	The corresponding port is not the coupler port of this IKS-6500 switch.

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

RJ45 Ports	10/100BaseT(X) and 10/100/1000BaseT(X) auto negotiation speed
Fiber Ports	100BaseSFP slot or 1000BaseSFP slot
System LED Indicators	STAT, PWR1, PWR2, FAULT, MSTR/HEAD, CPLR/TAIL
Module LED Indicators	LNK/ACT, FDX/HDX, SPEED, RING PORT, COUPLER PORT

Power

Input Voltage	110/220 VAC (85 to 264 VAC)
Power Consumption	IKS-6524-F-HV-T: 333/222mA @ 110/230VAC IKS-6524-F-HV-HV-T: 402/324mA @ 110/230VAC IKS-6524-8SFP-F-HV-T: 501/295mA @ 110/230VAC IKS-6524-8SFP-F-HV-HV-T: 555/390mA @ 110/230VAC IKS-6526-2GTXSFP-F-HV-T: 398/254mA @ 110/230VAC IKS-6526-2GTXSFP-F-HV-HV-T: 465/350mA @ 110/230VAC

Physical Characteristics

Housing	IP 30 protection, metal case
Dimensions (W x H x D)	440 x 44 x 342.5 mm (17.32 x 1.73 x 13.48 in.)
Weight	IKS-6524: 4780g IKS-6524-8SFP: 4850g IKS-6526-2GTXSFP: 4820g
Installation	19" rack mounting

Regulatory Approvals

Safety	UL60950-1, CSA C22.2 No. 60950-1, EN60950-1 (Pending)
Road Traffic	NEMA TS2
Maritime	DNV (Pending), GL (Pending), ABS (Pending), LR (Pending), NK (Pending)
Rail Traffic	EN50121-4
EMI	FCC Part 15, CISPR (EN55022) class A
Hazardous Location	UL/cUL Class I, Division 2, Groups A, B, C, D (Pending)

Environmental Limits

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)
Warranty	5 years

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