

IKS-6726A Series

24+2G-port modular managed Ethernet switches



Features and Benefits

- 2 Gigabit plus 24 Fast Ethernet ports for copper and fiber
- Turbo Ring and Turbo Chain (recovery time < 20 ms @ 250 switches), and STP/RSTP/MSTP for network redundancy
- Isolated redundant power inputs with universal 24 VDC, 48 VDC, or 110/220 VDC/VAC power supply range
- Modular design lets you choose from a variety of media combinations
- -40 to 75°C operating temperature range
- Supports MXstudio for easy, visualized industrial network management
- V-ON™ ensures millisecond-level multicast data and video network recovery

Certifications



Introduction

The IKS-6726A Series is designed to meet the rigorous demands of mission-critical applications for industry and business, such as traffic control systems and maritime applications. The IKS-6726A's Gigabit and fast Ethernet backbone, redundant ring, and 24/48 VDC or 110/220 VAC dual isolated redundant power supplies increase the reliability of your communications and save on cabling and wiring costs.

The modular design of the IKS-6726A also makes network planning easy, and allows greater flexibility by letting you install up to 2 Gigabit ports and 24 fast Ethernet ports.

Additional Features and Benefits

- Command line interface (CLI) for quickly configuring major managed functions
- DHCP Option 82 for IP address assignment with different policies
- Supports EtherNet/IP, PROFINET, and Modbus TCP protocols for device management and monitoring
- 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
- Line-swap fast recovery
- TACACS+, IEEE 802.1X, SNMPv3, HTTPS, and SSH to enhance network security
- SNMPv1/v2c/v3 for different levels of network management
- RMON for proactive and efficient network monitoring
- Bandwidth management prevents unpredictable network status with "Lock port" to restrict access to authorized MAC addresses
- Port mirroring for online debugging
- Automatic warning by exception through email and relay output
- Automatic recovery of connected device's IP addresses
- Configurable by web browser, Telnet/serial console, CLI, Windows utility, and ABC-02-USB automatic backup configurator

Specifications

Input/Output Interface

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|------------------------------------------------------|---------------------------------------------------------------|
| Alarm Contact Channels | 1 relay output with current carrying capacity of 1 A @ 24 VDC |
| Ethernet Interface | |
| 10/100BaseT(X) Ports (RJ45 connector) | 8 |
| Combo Ports (10/100/1000BaseT(X) or 100/1000BaseSFP) | 2 |

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| Module | 2 modular slots for any 8-port or 6-port Interface Modules with 10/100BaseT(X), 100BaseFX (SC/ST connector), or 100Base SFP ¹ |
| Standards | IEEE 802.1D-2004 for Spanning Tree Protocol IEEE 802.1p for Class of Service IEEE 802.1Q for VLAN Tagging IEEE 802.1s for Multiple Spanning Tree Protocol IEEE 802.1w for Rapid Spanning Tree Protocol IEEE 802.1X for authentication IEEE 802.3 for 10BaseT IEEE 802.3ab for 1000BaseT(X) IEEE 802.3ad for Port Trunk with LACP IEEE 802.3u for 100BaseT(X) and 100BaseFX IEEE 802.3x for flow control IEEE 802.3z for 1000BaseSX/LX/LHX/ZX |

Ethernet Software Features

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|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Management | Back Pressure Flow Control, BOOTP, DDM, DHCP Option 66/67/82, DHCP Server/Client, Flow control, IPv4/IPv6, LLDP, Port Mirror, RARP, RMON, SMTP, SNMP Inform, SNMPv1/v2c/v3, Syslog, Telnet, TFTP |
| Filter | 802.1Q, GMRP, GVRP, IGMP v1/v2/v3 |
| Redundancy Protocols | Link Aggregation, MSTP, RSTP, STP, Turbo Chain, Turbo Ring v1/v2, V-ON |
| Security | Access control list, Broadcast storm protection, HTTPS/SSL, MAB authentication, NTP authentication, Port Lock, RADIUS, SSH, TACACS+ |
| Time Management | SNTP |
| Industrial Protocols | EtherNet/IP, Modbus TCP, PROFINET |
| MIB | Ethernet-like MIB, MIB-II, P-BRIDGE MIB, Q-BRIDGE MIB, RMON MIB Groups 1, 2, 3, 9, RSTP MIB |

Switch Properties

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|--------------------|---------------|
| IGMP Groups | 2048 |
| Jumbo Frame Size | 9.6 KB |
| MAC Table Size | 16 K |
| Max. No. of VLANs | 64 |
| Packet Buffer Size | 12 Mbits |
| Priority Queues | 4 |
| VLAN ID Range | VID 1 to 4094 |

USB Interface

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|--------------|------------|
| Storage Port | USB Type A |
|--------------|------------|

Serial Interface

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| Console Port | USB-serial console (Type B connector) |
|--------------|---------------------------------------|

1. See the IM-6700A datasheet for Fast Ethernet module product information.

Power Parameters

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| Input Voltage | IKS-6726A-2GTXSFP-24-T: 24 VDC IKS-6726A-2GTXSFP-24-24-T: 24 VDC (redundant dual inputs) IKS-6726A-2GTXSFP-48-T: 48 VDC IKS-6726A-2GTXSFP-48-48-T: 48 VDC (redundant dual inputs) IKS-6726A-2GTXSFP-HV-T: 110/220 VAC IKS-6726A-2GTXSFP-HV-HV-T: 110/220 VAC (redundant dual inputs) |
| Operating Voltage | IKS-6726A-2GTXSFP-HV-T: 85 to 264 VAC IKS-6726A-2GTXSFP-HV-HV-T: 85 to 264 VAC IKS-6726A-2GTXSFP-24-T: 18 to 36 VDC IKS-6726A-2GTXSFP-24-24-T: 18 to 36 VDC IKS-6726A-2GTXSFP-48-T: 36 to 72 VDC IKS-6726A-2GTXSFP-48-48-T: 36 to 72 VDC |
| Overload Current Protection | Supported |
| Reverse Polarity Protection | Supported |
| Input Current | IKS-6726A-2GTXSFP-24-T/2GTXSFP-24-24-T: 0.36 A @ 24 VDC IKS-6726A-2GTXSFP-48-T/2GTXSFP-48-48-T: 0.19 A @ 48 VDC IKS-6726A-2GTXSFP-HV-T/2GTXSFP-HV-HV-T: 0.28/0.14 A @ 110/220 VAC |

Physical Characteristics

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|--------------|---------------------------------------------|
| IP Rating | IP30 |
| Dimensions | 440 x 44 x 280 mm (17.32 x 1.37 x 11.02 in) |
| Weight | 4100 g (9.05 lb) |
| Installation | Rack mounting |

Environmental Limits

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

Standards and Certifications

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|-----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Safety | EN 60950-1, UL 60950-1 |
| EMC | EN 55032/24 |
| EMI | CISPR 32, FCC Part 15B Class A |
| EMS | IEC 61000-4-2 ESD: Contact: 6 kV; Air: 8 kV IEC 61000-4-3 RS: 80 MHz to 1 GHz: 10 V/m IEC 61000-4-4 EFT: Power: 2 kV; Signal: 2 kV IEC 61000-4-5 Surge: Power: 2 kV; Signal: 1 kV IEC 61000-4-6 CS: 10 V IEC 61000-4-8 PFMF |
| Railway | EN 50121-4 |
| Maritime | ABS, DNV-GL, LR, NK |
| Freefall | IEC 60068-2-32 |
| Shock | IEC 60068-2-27 |
| Vibration | IEC 60068-2-6 |

MTBF

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|-----------|--------------------------|
| Time | 149,151 hrs |
| Standards | Telcordia (Bellcore), GB |

Warranty

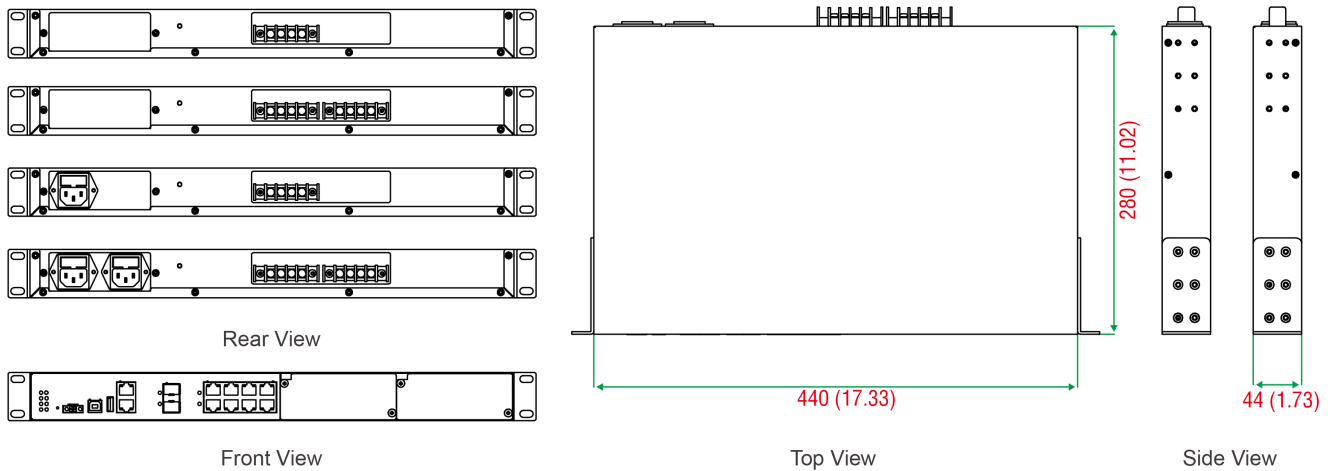
| | |
|-----------------|----------------------------------------------------------------------|
| Warranty Period | 5 years |
| Details | See www.moxa.com/warranty |

Package Contents

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|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Device | 1 x IKS-6726A Series switch |
| Cable | 1 x USB type A male to USB type B male |
| Installation Kit | 2 x rack-mounting ear 6 x cap, plastic, for SFP slot |
| Power Supply | IKS-6726A-2GTXSFP-HV-T: 1 x power cord, EU type IKS-6726A-2GTXSFP-HV-HV-T: 2 x power cord, EU type IKS-6726A-2GTXSFP-HV-T: 1 x power cord, US type IKS-6726A-2GTXSFP-HV-HV-T: 2 x power cord, US type |
| Documentation | 1 x document and software CD 1 x quick installation guide 1 x warranty card |
| Note | SFP modules and/or modules from the IM-6700A Module Series need to be purchased separately for use with this product. |

Dimensions

Unit: mm (inch)



Ordering Information

| Model Name | Combo Ports (10/100/1000BaseT(X) or 100/1000BaseSFP) | 100BaseSFP Slots | 10/100BaseT(X) Ports RJ45 Connector | 100BaseFX Ports | Operating Temp. | Input Voltage | Redundant Dual Input |
|---------------------------|------------------------------------------------------------|---------------------|-------------------------------------------|--------------------|--------------------|--------------------------|-------------------------|
| IKS-6726A-2GTXSFP-HV-T | 2 | Up to 18 | Up to 24 | Up to 12 | -40 to 75°C | 110/220 VAC power supply | - |
| IKS-6726A-2GTXSFP-HV-HV-T | 2 | Up to 18 | Up to 24 | Up to 12 | -40 to 75°C | 110/220 VAC power supply | ✓ |
| IKS-6726A-2GTXSFP-24-T | 2 | Up to 18 | Up to 24 | Up to 12 | -40 to 75°C | 24 VDC power supply | - |

| Model Name | Combo Ports (10/100/1000BaseT(X) or 100/1000BaseSFP) | 100BaseSFP Slots | 10/100BaseT(X) Ports RJ45 Connector | 100BaseFX Ports | Operating Temp. | Input Voltage | Redundant Dual Input |
|-------------------------------|------------------------------------------------------------|---------------------|-------------------------------------------|--------------------|--------------------|------------------------|-------------------------|
| IKS-6726A- 2GTXSFP-24-24-T | 2 | Up to 18 | Up to 24 | Up to 12 | -40 to 75°C | 24 VDC power supply | ✓ |
| IKS-6726A- 2GTXSFP-48-T | 2 | Up to 18 | Up to 24 | Up to 12 | -40 to 75°C | 48 VDC power supply | – |
| IKS-6726A- 2GTXSFP-48-48-T | 2 | Up to 18 | Up to 24 | Up to 12 | -40 to 75°C | 48 VDC power supply | ✓ |

Accessories (sold separately)

IM-6700A Module Series

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|------------------|-------------------------------------------------------------------------------------------------------|
| IM-6700A-2MSC4TX | Fast Ethernet module with 2 multi-mode 100BaseFX ports with SC connectors and 4 10/100BaseT(X) ports |
| IM-6700A-2MST4TX | Fast Ethernet module with 2 multi-mode 100BaseFX ports with ST connectors and 4 10/100BaseT(X) ports |
| IM-6700A-2SSC4TX | Fast Ethernet module with 2 single-mode 100BaseFX ports with SC connectors and 4 10/100BaseT(X) ports |
| IM-6700A-4MSC2TX | Fast Ethernet module with 4 multi-mode 100BaseFX ports with SC connectors and 2 10/100BaseT(X) ports |
| IM-6700A-4MST2TX | Fast Ethernet module with 4 multi-mode 100BaseFX ports with ST connectors and 2 10/100BaseT(X) ports |
| IM-6700A-4SSC2TX | Fast Ethernet module with 4 single-mode 100BaseFX ports with SC connectors and 2 10/100BaseT(X) ports |
| IM-6700A-6MSC | Fast Ethernet module with 6 multi-mode 100BaseFX ports with SC connectors |
| IM-6700A-6MST | Fast Ethernet module with 6 multi-mode 100BaseFX ports with ST connectors |
| IM-6700A-6SSC | Fast Ethernet module with 6 single-mode 100BaseFX ports with SC connectors |
| IM-6700A-8PoE | Fast Ethernet PoE+ module with 8 100BaseT(X) PoE/PoE+ ports (for IKS-6728A-8PoE Series only) |
| IM-6700A-8SFP | Fast Ethernet module with 8 100BaseSFP slots |
| IM-6700A-8TX | Fast Ethernet module with 8 10/100T(X) ports |

Storage Kits

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| ABC-02-USB | Configuration backup and restoration tool, firmware upgrade, and log file storage tool for managed Ethernet switches and routers, 0 to 60°C operating temperature |
|------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|

SFP Modules

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|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|
| SFP-1FELLC-T | SFP module with 1 100Base single-mode with LC connector for 80 km transmission, -40 to 85°C operating temperature |
| SFP-1FEMLC-T | SFP module with 1 100Base multi-mode with LC connector for 4 km transmission, -40 to 85°C operating temperature |
| SFP-1FESLC-T | SFP module with 1 100Base single-mode with LC connector for 40 km transmission, -40 to 85°C operating temperature |
| SFP-1G10ALC | WDM-type (BiDi) SFP module with 1 1000BaseSFP port with LC connector for 10 km transmission; TX 1310 nm, RX 1550 nm, 0 to 60°C operating temperature |
| SFP-1G10ALC-T | WDM-type (BiDi) SFP module with 1 1000BaseSFP port with LC connector for 10 km transmission; TX 1310 nm, RX 1550 nm, -40 to 85°C operating temperature |
| SFP-1G10BLC | WDM-type (BiDi) SFP module with 1 1000BaseSFP port with LC connector for 10 km transmission; TX 1550 nm, RX 1310 nm, 0 to 60°C operating temperature |
| SFP-1G10BLC-T | WDM-type (BiDi) SFP module with 1 1000BaseSFP port with LC connector for 10 km transmission; TX 1550 nm, RX 1310 nm, -40 to 85°C operating temperature |
| SFP-1G20ALC | WDM-type (BiDi) SFP module with 1 1000BaseSFP port with LC connector for 20 km transmission; TX 1310 nm, RX 1550 nm, 0 to 60°C operating temperature |

| | |
|-----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|
| SFP-1G20ALC-T | WDM-type (BiDi) SFP module with 1 1000BaseSFP port with LC connector for 20 km transmission; TX 1310 nm, RX 1550 nm, -40 to 85°C operating temperature |
| SFP-1G20BLC | WDM-type (BiDi) SFP module with 1 1000BaseSFP port with LC connector for 20 km transmission; TX 1550 nm, RX 1310 nm, 0 to 60°C operating temperature |
| SFP-1G20BLC-T | WDM-type (BiDi) SFP module with 1 1000BaseSFP port with LC connector for 20 km transmission; TX 1550 nm, RX 1310 nm, -40 to 85°C operating temperature |
| SFP-1G40ALC | WDM-type (BiDi) SFP module with 1 1000BaseSFP port with LC connector for 40 km transmission; TX 1310 nm, RX 1550 nm, 0 to 60°C operating temperature |
| SFP-1G40ALC-T | WDM-type (BiDi) SFP module with 1 1000BaseSFP port with LC connector for 40 km transmission; TX 1310 nm, RX 1550 nm, -40 to 85°C operating temperature |
| SFP-1G40BLC | WDM-type (BiDi) SFP module with 1 1000BaseSFP port with LC connector for 40 km transmission; TX 1550 nm, RX 1310 nm, 0 to 60°C operating temperature |
| SFP-1G40BLC-T | WDM-type (BiDi) SFP module with 1 1000BaseSFP port with LC connector for 40 km transmission; TX 1550 nm, RX 1310 nm, -40 to 85°C operating temperature |
| SFP-1GEZXLC | SFP module with 1 1000BaseEZX port with LC connector for 110 km transmission, 0 to 60°C operating temperature |
| SFP-1GEZXLC-120 | SFP module with 1 1000BaseEZX port with LC connector for 120 km transmission, 0 to 60°C operating temperature |
| SFP-1GLHLC | SFP module with 1 1000BaseLH port with LC connector for 30 km transmission, 0 to 60°C operating temperature |
| SFP-1GLHLC-T | SFP module with 1 1000BaseLH port with LC connector for 30 km transmission, -40 to 85°C operating temperature |
| SFP-1GLHXL | SFP module with 1 1000BaseLHX port with LC connector for 40 km transmission, 0 to 60°C operating temperature |
| SFP-1GLHXL-T | SFP module with 1 1000BaseLHX port with LC connector for 40 km transmission, -40 to 85°C operating temperature |
| SFP-1GLSXL | SFP module with 1 1000BaseLSX port with LC connector for 500 m transmission, 0 to 60°C operating temperature |
| SFP-1GLSXL-T | SFP module with 1 1000BaseLSX port with LC connector for 500 m transmission, -40 to 85°C operating temperature |
| SFP-1GLXL | SFP module with 1 1000BaseLX port with LC connector for 10 km transmission, 0 to 60°C operating temperature |
| SFP-1GLXL-T | SFP module with 1 1000BaseLX port with LC connector for 10 km transmission, -40 to 85°C operating temperature |
| SFP-1GSXL | SFP module with 1 1000BaseSX port with LC connector for 300/550 m transmission, 0 to 60°C operating temperature |
| SFP-1GSXL-T | SFP module with 1 1000BaseSX port with LC connector for 300/550 m transmission, -40 to 85°C operating temperature |
| SFP-1GZXLC | SFP module with 1 1000BaseZX port with LC connector for 80 km transmission, 0 to 60°C operating temperature |
| SFP-1GZXLC-T | SFP module with 1 1000BaseZX port with LC connector for 80 km transmission, -40 to 85°C operating temperature |

Power Cords

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|------------------|-----------------------------------------------------------------|
| PWC-C13AU-3B-183 | Power cord with Australian (AU) plug, 1.83 m |
| PWC-C13CN-3B-183 | Power cord with three-prong China (CN) plug, 1.83 m |
| PWC-C13EU-3B-183 | Power cord with Continental Europe (EU) plug, 1.83 m |
| PWC-C13UK-3B-183 | Power cord with United Kingdom (UK) plug, 1.83 m |
| PWC-C13US-3B-183 | Power cord with United States (US) plug, 1.83 m |
| PWC-C7AU-2B-183 | Power cord with Australian (AU) plug, 2.5A/250V, 1.83 m |
| PWC-C7EU-2B-183 | Power cord with Continental Europe (EU) plug, 2.5A/250V, 1.83 m |
| PWC-C7UK-2B-183 | Power cord with United Kingdom (UK) plug, 2.5A/250V, 1.83 m |
| PWC-C7US-2B-183 | Power cord with United States (US) plug, 10A/125V, 1.83 m |

Software

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|-------------------|------------------------------------------------------------------------------------------------|
| MXview-50 | Industrial network management software with a license for 50 nodes (by IP address) |
| MXview-100 | Industrial network management software with a license for 100 nodes (by IP address) |
| MXview-250 | Industrial network management software with a license for 250 nodes (by IP address) |
| MXview-500 | Industrial network management software with a license for 500 nodes (by IP address) |
| MXview-1000 | Industrial network management software with a license for 1000 nodes (by IP address) |
| MXview-2000 | Industrial network management software with a license for 2000 nodes (by IP address) |
| MXview Upgrade-50 | License expansion of MXview industrial network management software by 50 nodes (by IP address) |

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