



802.3af/at
Compliant



Gigabit
Ethernet Speed



SFP
Support



Fanless
Design



* Compatible with
AltaiGate/AltaiCare On-Premises

The IES2100 Series is a cost-effective industrial Layer 2 managed switch family engineered for mission-critical industrial applications. Featuring up to 24 Gigabit Ethernet downlink ports and four 1G SFP uplinks, the series delivers robust bandwidth for data-intensive deployments including mining operations, utility plants and large-scale surveillance networks.

Engineered with a fanless design and natural heat-dissipation structure, the IES2100 Series operates reliably across an extended temperature range of -40°C to 60°C. It incorporates industrial-grade protection mechanisms, including enhanced surge resistance and electromagnetic shielding, ensuring long-term stability and durability in harsh operating conditions—well beyond the capabilities of standard commercial switches.

The platform supports a comprehensive set of advanced Layer 2 features, including VLAN, STP/RSTP/MSTP, ERPS, and multicast control, enabling it to function effectively as an access switch for network equipment and peripheral devices such as Wi-Fi access points, IP cameras, and IoT sensors. Robust security mechanisms—such as IEEE 802.1X, MAC authentication, and RADIUS—help safeguard network access and prevent unauthorized connections.

With flexible management interfaces including Console, Telnet, SSH, SNMP, and Web GUI, the IES2100 Series offers powerful capabilities for industrial IoT, smart transportation, and critical infrastructure networks, delivering reliability, scalability, and simplified operation.

* Features to be available

Hardware Specifications

Model	IES2100-8G4S	IES2100-8G4S-POE	IES2100-24G4S
Copper Ports	8 x 10/100/1000 Mbps RJ-45 Ports	8 x 10/100/1000 Mbps RJ-45 Ports (PoE+)	24 x 10/100/1000 Mbps RJ-45 Ports
SFP/SFP+ Slots	4 x 1 G SFP Uplink Ports	4 x 1 G SFP Uplink Ports	4 x 1 G SFP Uplink Ports
Console Port	1 x RJ45	1 x RJ45	1 x RJ45
Surge Protection (Power)	4 kV	4 kV	6 kV
Surge Protection (Data)	4 kV	4 kV	4 kV
Installation	DIN rail	DIN rail	19" Rack
Dimensions	165 (H) x 41.7 (W) x 150 (D) mm	165 (H) x 41.7 (W) x 150 (D) mm	44 (H) x 440 (W) x 260 (D) mm
Input Power	24-48 VDC	24-48 VDC	100-240 VAC, 50-60 Hz
PoE Standard	–	802.3af/at	–
PoE Ports	–	Port 1 to 8	–
Power Pin Assignment	–	1/2 (-), 3/6 (+)	–
Max Power Per Port	–	30 W	–
Total Power Budget	–	120 W	–

Performance Specifications

Model	IES2100-8G4S	IES2100-8G4S-POE	IES2100-24G4S
Architecture	Store-and-Forward	Store-and-Forward	Store-and-Forward
Switching Capacity	24 Gbps	24 Gbps	56 Gbps
Packet Forwarding Rate	17.8 Mpps	17.8 Mpps	41.6 Mpps
CPU	MIPS 500 MHz	MIPS 500 MHz	MIPS 500 MHz
DRAM	128 MB	128 MB	128 MB
Flash	32 MB	32 MB	32 MB
MAC Address Table	8K	8K	8K
Buffer Memory	4.1 MB	4.1 MB	4.1 MB
Jumbo Frame	10 KB	10 KB	10 KB

Networking and Software Features

Port	• IEEE 802.3x flow control • Storm suppression based on packet type (Broadcast/Multicast/Unicast) • Port auto-negotiation • Port speed and duplex mode configuration • MDI/MDI-X crossover • Link-delay • MTU configuration • Admin-down • Port isolation • Port rate limiting • IEEE 802.3az EEE (Energy Efficient Ethernet)
VLAN (Virtual Local Area Network)	• 4K VLANs • Access, Trunk, Hybrid VLAN • Protocol-based VLAN • Q-in-Q
MAC Address Table	• MAC address learning and aging • Static MAC address • Blackhole MAC address
Link Aggregation	• Static aggregation • IEEE 802.3ad LACP (Link Aggregation Control Protocol)
DHCP (Dynamic Host Configuration Protocol)	• IPv4 DHCP Client/Snooping • Option 82
ARP (Address Resolution Protocol)	• Static/dynamic ARP • Gratuitous ARP • ARP Proxy
IPv6	• ND (Neighbour Discovery) • PMTUD (Path MTU Discovery) • IPv6-Ping, IPv6-Tracert, IPv6-Telnet, IPv6-TFTP
Multicast Protocols	• IGMP (Internet Group Management Protocol) Snooping • Multicast VLAN with SVGL (Shared VLAN Group Learning)
Loop Protection	• STP (Spanning Tree Protocol)/RSTP (Rapid STP)/MSTP (Multiple STP) • Root Guard • BPDU Guard, TC (Topology Change) protection • Loop detection • ERPS (Ethernet Ring Protection Switching)
Redundancy	• SmartLink • MonitorLink
QoS (Quality of Service)	• Diff-Serv QoS • 802.1p and DSCP priority marking
ACL (Access Control List)	• L2/L3/L4 ACL • IPv4/IPv6 ACL • Ingress ACL
Port Mirroring	• Port mirroring • Remote mirroring
Security	• User privilege level/password • 802.1X authentication • MAC authentication • RADIUS/local authentication • Serial port login • Whitelist

- SSH 2.0
- IP Source Guard
- DoS protection

Management and Maintenance

- IEEE 802.1AB LLDP
- FTP/TFTP upgrades
- Command Line Interface (Console/Telnet/SSH)
- Web (HTTPS)
- SNMP V1/V2/V3
- RMON (Remote Monitoring) Groups 1/2/3/9
- Logs/traps
- NTP/SNTP
- Ping/Tracert

Environment Specifications

Model	All Models
Operating Temperature	-40 ~ +60 °C
Storage Temperature	-40 ~ +70 °C
Operating & Storage Humidity	5% ~ 95% (Non-Condensing)

Certifications and Warranty

Model	All Models
Certifications	• * CE • * FCC • RoHS

Warranty 3-Year Limited Hardware Warranty

* To be available in the future

Product Ordering Information

Standard Package

Part No.: SD.IS2100-8G4S-000	• Model: IES2100-8G4S • Industrial 12-Port Managed Switch
Part No.: SD.IS2100-8G4SP-000	• Model: IES2100-8G4S-POE • Industrial 12-Port Managed PoE Switch
Part No.: SD.IS2100-24G4S-000	• Model: IES2100-24G4S • Industrial 28-Port Managed Switch • AC Power Cord

Contact Us

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DS-IES2100-260429-V1.0

The information contained herein is subject to change without prior notice.