Full Gigabit Managed L3-lite Industrial Switch

AIES200 Series

- **Wide temperature operation**
- **Advanced hardware architecture with high port density**
- **Versatile service capabilities with IPv6 support**
- **Comprehensive security mechanisms**
- **IP40-rated protection with 6 kV lightning resistance**

ASCENT AIES200-L25 series is built on a new generation of high-performance industrial hardware and the robust BDROS platform, incorporating latest technology to deliver carrier-grade reliability. Designed for demanding industrial environments, the AIES200-L25 series supports ACL, QinQ, QoS, and static routing while offering wide-voltage dual power input through its standard DIN-rail metal enclosure.

Engineered for mission-critical networks, AIES200-L25 adopts a highly reliable industrial Ethernet ring technology, enabling hardware-accelerated protection switching. The self-healing time per node is less than 5 milliseconds, and a full-ring recovery typically completes within 50 milliseconds—ensuring real-time service continuity.

With enhanced EMC protection, anti-vibration and anti-shock design, and IP40 environmental hardening, the AIES200-L25 series is well suited for harsh industrial deployments. These capabilities make it a powerful platform for energy systems, transportation networks, industrial automation, environmental monitoring, and security or military applications, where long-term stability and rapid fault recovery are essential.

Key Features

- Lightning protection level: 6KV.IP40 protection, industrial fanless thermal conduction.DIN-rail aluminum alloy shell, which is compact and convenient
- Supports node self-healing time less than 5 milliseconds, and ring network self-healing time less than 50 milliseconds (typical value)
- Supports forming a selfhealing ring network between any two ports, and supports multiple independent self-healing rings
- Provides a data packet loss protection mechanism for quickly recovering from failures
- Provides hierarchical bandwidth services through rate limiting and traffic shaping in the layer-2 QoS function
- Supports simple network management protocol (SNMP) and cloud-based operating platform (Pallas)
- The mean time between failures exceeds 800,000 hours

Model Lists

AIES200-L25-4T2S
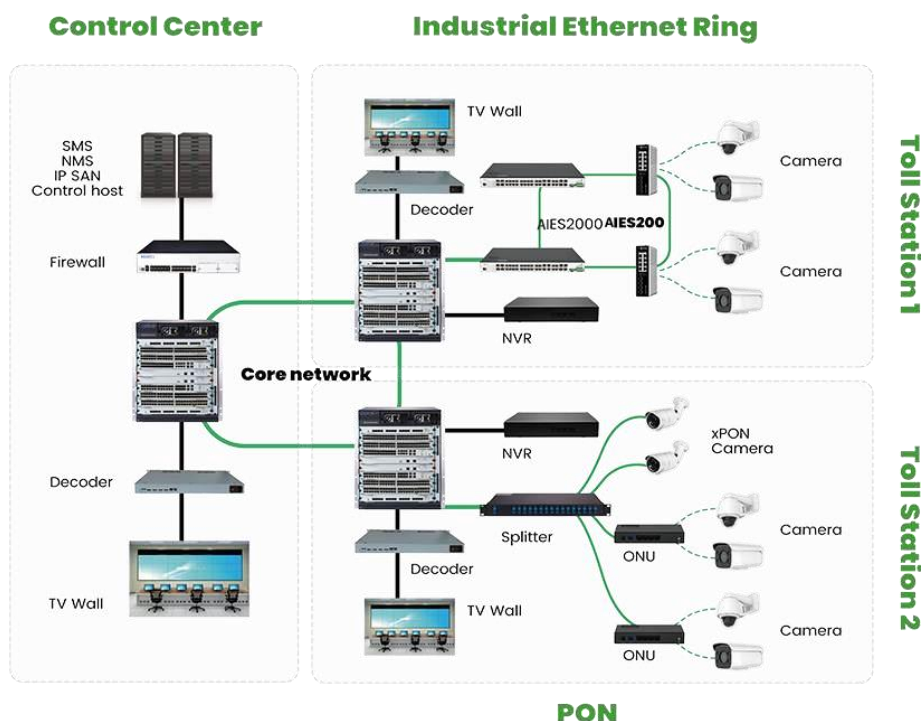· 4-Port Gigabit RJ45
· 2-Port Gigabit SFP

AIES200-L25-8T2S
· 8-Port Gigabit RJ45
· 2-Port Gigabit SFP

AIES200-L25-8T4S
· 8-Port Gigabit RJ45
· 4-Port Gigabit SFP

Application Diagram

Specifications

Product Characteristics

Item		Unit	AIES200-L25-4T2S	AIES200-L25-8T2S	AIES200-L25-8T4S
			Description		
Gigabit Interface	RJ45		4	8	8
	SFP		2	2	4
Console(RJ45)			1	1	1
Backplane		Gbps	20	20	56
Forwarding Rate		Mpps	9	15	18
Chassis	Dimensions (WxDxH)	mm	138x108x51	138x108x51	164x107x51
	Weight(Empty)	kg	0.6	0.6	0.6
Package	Dimensions (WxDxH)	mm	245x190x60	245x190x60	245x190x60
	Weight	kg	0.8	0.8	0.8
Power Consumption	No-Load	W	<12	<12	<12
	Full-Load	W	18	18	20
Power Supply			Dual DC 12 to 55V (Pheonix) DC 12V (Jack)	Dual DC 12 to 55V (Pheonix) DC 12V (Jack)	Dual DC 12 to 55V (Pheonix) DC 12V (Jack)
Total Output BTU (1000BTU/H=293W)			61.43	61.43	68.26
MTBF(H)			>800,000	>800,000	>800,000
Forwarding Mode			Store-Forward	Store-Forward	Store-Forward
Flash		MB	16	16	16
DRAM		MB	128	128	128
MAC		K	8	8	8
Buffer Size		MB	4.1	4.1	4.1
Jumbo Frame		K	9	9	9
Total SVI			10	10	10

Features

Item	Description
VLAN	4K VLAN entries
	GVRP
	QinQ
	Private VLAN
	Voice VLAN
Ring Protection	802.1D (STP), 802.1W (RSTP) and 802.1S (MSTP)
	BPDU protection, root protection and ring protection
	EAPS
	G.8032 ERPS
Multicast	MVR
	IGMP Snooping
	IGMP Fast Leave
	Multicast group policy and multicast number limit
IP Routing	Static route
	RIP, OSPF
	128 routing table
QoS	CAR traffic control
	802.1P/DSCP priority remark
	Multiple queuing algorithms such as SP, WRR or SP+WRR
	IP ACL/ANY/VLAN/COS
	DSCP/IP Preference based QoS
	Traffic supervision and traffic shaping
	Drop,Redirect
Security	Identification and filtering of L2/L3/ L4-based ACL
	Suppression of broadcast, multicast and unknown unicast packet
	Port isolation
	Port security, IP+MAC+port binding
	DHCP sooping, DHCP option82
	IEEE 802.1x authentication
	Radius and TACACS+
	Command line hierarchical protection
DHCP	DHCP Server/Client/Relay
	DHCP Snooping
Reliability	Static/LACP LAG
	Ethernet OAM
	ISSU
	Backup-link
	VRRP
Management and Maintenance	Console, Telnet, SSH 2.0
	Zero Touch Provisioning (ZTP)
	HTTP/HTTPS
	SNMP v1/v2/v3
	Upload and download files through TFTP/FTP
	Remote Network Monitoring (RMON)
	Syslog
	SPAN, RSPAN
IPv6	ICMPv6, DHCPv6, ACLv6, IPv6 Telnet
	IPv6 Neighbor Discovery
	Path MTU Discovery
	MLD Snooping

Item	Description
ACL	VLAN ACL
	L2 to 4 ACL
	IPv4, IPv6 ACL

Ordering Information

Product name	Product description
AIES200-L25-4T2S	4-Port Gigabit RJ45 + 2-Port Gigabit SFP L3-lite Managed Industrial Switch (dual 12 to 55V DC pheonix power input, single 12V DC jack power input; operating temperature: -40 to 85°C; lightning protection level of 6KV; IP40; DIN-rail installation)
AIES200-L25-8T2S	8-Port Gigabit RJ45 + 2-Port Gigabit SFP L3-lite Managed Industrial Switch (dual 12 to 55V DC pheonix power input, single 12V DC jack power input; operating temperature: -40 to 85°C; lightning protection level of 6KV; IP40; DIN-rail installation)
AIES200-L25-8T4S	8-Port Gigabit RJ45 + 4-Port Gigabit SFP L3-lite Managed Industrial Switch (dual 12 to 55V DC pheonix power input, single 12V DC jack power input; operating temperature: -40 to 85° C; lightning protection level of 6KV; IP40; DIN-rail installation)

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