

IMS5300

Industrial Managed 10G Switch

L3 managed, 8/16/24x10/100/1000Base-T + 4x10G SFP








Overview

IMS5300 Industrial L3 Managed Switch adopts the store-forward architecture, fan-less, and energy-saving design, providing 8/16/24-port 10/100/1000M RJ45 port and 4x 10G SFP+ Uplink port. Full-series design with protection against lightning, anti-static, and operate in $-40^{\circ}\text{C}\sim 85^{\circ}\text{C}$ for harsh environments; such as industrial automation, public security, power system, intelligent transportation systems (ITS), shipping, mining, and water conservancy fields.

Features

- Support static routing, RIPv1/v2, OSPFv2, VRRP, BGP dynamic routing and policy routing
- Support STP/RSTP/MSTP, ERPS Fast ring protocol
- Supports flow control, loop protection, link aggregation, storm suppression, mirroring, and DDM
- Support IEEE802.1Q VLAN, QinQ VLAN, protocol VLAN, Voice VLAN, Private VLAN, GVRP
- Supports SP, WRR, SP+WRR scheduling, ensure priority flow forwarding
- Support IGMP Snooping, MLD Snooping, suit for HD Video surveillance and video conference
- Support Web, CLI, SNMP(V1/V2/V3), Telnet management
- Support HTTPS、SSH encryption, making management more secure
- Supports RMON, system logs, and traffic statistics to facilitate network optimization
- Supports LLDP, making network maintenance simple
- Support DHCP Snooping, Qos, ACL
- Supports 802.1X authentication and MAC address filtering, ensures the legitimacy of access users
- Supports CPU monitoring, Ping detection, Traceroute detection
- Support PoE Management
- Providing 8/16/24-port gigabit access and 4x 10G uplink products
- Adopt Industrial Level-4 design, support EFT/ESD/Surge protection
- Working Temperature $-40\sim 85^{\circ}\text{C}$
- 12~58Vdc or 100~240Vac dual input
- Complete LED indicators to identify the working status quickly
- IP40 anti-oxidation aluminum alloy, weight lighter and head release rapidly

Product List

Model	Description
 <p data-bbox="284 607 467 636">IMS5300-8T4X</p>	<p data-bbox="596 347 1114 376">Port: 8x 10/100/1000M RJ45, 4x 10G SFP+</p> <p data-bbox="596 389 868 418">Switch Capacity: 128G</p> <p data-bbox="596 432 1007 461">Packet forwarding Rate: 71.4Mpps</p> <p data-bbox="596 474 820 504">MAC address: 16k</p> <p data-bbox="596 517 735 546">Buffer: 12M</p> <p data-bbox="596 560 1002 589">Power Input: 44~58Vdc dual input</p> <p data-bbox="596 602 986 631">Working Temperature: -40~85°C</p> <p data-bbox="596 645 855 674">Size: 170x120x60mm</p>
 <p data-bbox="284 943 467 972">IMS5300-8P4X</p>	<p data-bbox="596 678 1102 707">Port: 8x 10/100/1000M PoE, 4x 10G SFP+</p> <p data-bbox="596 721 868 750">Switch Capacity: 128G</p> <p data-bbox="596 763 1007 792">Packet forwarding Rate: 71.4Mpps</p> <p data-bbox="596 806 820 835">MAC address: 16k</p> <p data-bbox="596 848 735 878">Buffer: 12M</p> <p data-bbox="596 891 1002 920">Power Input: 44~58Vdc dual input</p> <p data-bbox="596 934 986 963">Working Temperature: -40~85°C</p> <p data-bbox="596 976 855 1005">Size: 170x120x60mm</p>
 <p data-bbox="284 1283 467 1312">IMS5300-8B4X</p>	<p data-bbox="596 1019 1142 1048">Port: 8x 10/100/1000M PoE(bt), 4x 10G SFP+</p> <p data-bbox="596 1061 868 1090">Switch Capacity: 128G</p> <p data-bbox="596 1104 1007 1133">Packet forwarding Rate: 71.4Mpps</p> <p data-bbox="596 1146 820 1176">MAC address: 16k</p> <p data-bbox="596 1189 735 1218">Buffer: 12M</p> <p data-bbox="596 1232 1002 1261">Power Input: 44~58Vdc dual input</p> <p data-bbox="596 1274 986 1303">Working Temperature: -40~85°C</p> <p data-bbox="596 1317 855 1346">Size: 170x120x60mm</p>
 <p data-bbox="268 1624 483 1653">IMS5300-8T2S4X</p>	<p data-bbox="596 1359 1262 1388">Port: 8x 10/100/1000M RJ45, 2x 1G SFP, 4x 10G SFP+</p> <p data-bbox="596 1402 868 1431">Switch Capacity: 128G</p> <p data-bbox="596 1444 1007 1473">Packet forwarding Rate: 74.4Mpps</p> <p data-bbox="596 1487 820 1516">MAC address: 16k</p> <p data-bbox="596 1529 735 1559">Buffer: 12M</p> <p data-bbox="596 1572 1002 1601">Power Input: 12~58Vdc dual input</p> <p data-bbox="596 1615 986 1644">Working Temperature: -40~85°C</p> <p data-bbox="596 1657 855 1686">Size: 170x120x60mm</p>
 <p data-bbox="268 1964 483 1993">IMS5300-8P2S4X</p>	<p data-bbox="596 1700 1249 1729">Port: 8x 10/100/1000M PoE, 2x 1G SFP, 4x 10G SFP+</p> <p data-bbox="596 1742 868 1771">Switch Capacity: 128G</p> <p data-bbox="596 1785 1007 1814">Packet forwarding Rate: 74.4Mpps</p> <p data-bbox="596 1827 820 1856">MAC address: 16k</p> <p data-bbox="596 1870 735 1899">Buffer: 12M</p> <p data-bbox="596 1912 1002 1942">Power Input: 44~58Vdc dual input</p> <p data-bbox="596 1955 986 1984">Working Temperature: -40~85°C</p> <p data-bbox="596 1998 855 2027">Size: 170x120x60mm</p>

 <p>IMS5300-8B2S4X</p>	<p>Port: 8x 10/100/1000M PoE(bt), 2x 1G SFP, 4x 10G SFP+</p> <p>Switch Capacity: 128G</p> <p>Packet forwarding Rate: 74.4Mpps</p> <p>MAC address: 16k</p> <p>Buffer: 12M</p> <p>Power Input: 12~58Vdc dual input</p> <p>Working Temperature: -40~85°C</p> <p>Size: 170x120x60mm</p>
 <p>IMS5300-24T4X</p>	<p>Port: 24x 10/100/1000M RJ45, 4x 10G SFP+</p> <p>Switch Capacity: 128G</p> <p>Packet forwarding Rate: 95.2Mpps</p> <p>MAC address: 16k</p> <p>Buffer: 12M</p> <p>Power Input: 12~58Vdc dual input</p> <p>Working Temperature: -40~85°C</p> <p>Size: 440x270x43.6mm</p>
 <p>IMS5300-16T8C4X</p>	<p>Port: 16x 10/100/1000M RJ45, 8x 1G Combo, 4x 10G SFP+</p> <p>Switch Capacity: 128G</p> <p>Packet forwarding Rate: 95.2Mpps</p> <p>MAC address: 16k</p> <p>Buffer: 12M</p> <p>Power Input: 100~240Vac dual input</p> <p>Working Temperature: -40~85°C</p> <p>Size: 440x270x43.6mm</p>
 <p>IMS5300-16P8C4X</p>	<p>Port: 16x 10/100/1000M PoE, 8x 1G Combo, 4x 10G SFP+</p> <p>Switch Capacity: 128G</p> <p>Packet forwarding Rate: 95.2Mpps</p> <p>MAC address: 16k</p> <p>Buffer: 12M</p> <p>Power Input: 100~240Vac, AC input 400/280W optional</p> <p>Working Temperature: -30~70°C</p> <p>Size: 440x270x43.6mm</p>
 <p>IMS5300-16S8C4X</p>	<p>Port: 16x 1G SFP, 8x 1G Combo, 4x 10G SFP+</p> <p>Switch Capacity: 128G</p> <p>Packet forwarding Rate: 95.2Mpps</p> <p>MAC address: 16k</p> <p>Buffer: 12M</p> <p>Power Input: 100~240Vac dual input</p> <p>Working Temperature: -40~85°C</p> <p>Size: 440x270x43.6mm</p>

Technical Specifications

Model	14-port Din Rail	28-port Rack-mounted
Performance		
Standards	IEEE802.3, IEEE802.3u, IEEE802.3ab, IEEE802.2an, IEEE802.3ae IEEE802.3z, IEEE802.3x, IEEE802.1Q VLAN, IEEE802.1d, IEEE802.1w, IEEE802.1s	
Forwarding mode	Store and Forward	
Switch Capacity	128Gbps/non-blocking	
Packet forwarding Rate	Refer to the product list	
MAC Address	16k	
Buffer	12M	
Jumbo Frame	10k	
Ports		
Copper port	10/100/1000M RJ45 Cat5/cat6 100M	
1G Fiber Port	1000/100M SFP Slot OM1/OM2 550m, OS1/OS2 up to 120km	
10G Fiber Port	10G SFP+ Slot OM3 300m, OS1/OS2 up to 120km	
Console	RS232 (RJ45)	
PoE		
Standard	IEEE802.3af/at	
Pin Assignment	1/2+, 3/6-	
PoE Budget	≤30W	
Electrical characteristics		
Power Input	12~58Vdc, 44~58Vdc(PoE)	100~240Vac 50/60Hz dual input
Power Consumption	Refer to spec	
Power connector	Terminal block	
Reverse polarity	support	/
Physical characteristics		
Housing	Metal, IP40 protection	
Installation	DIN rail, Wall-mounted (Optional)	Rack-mounted
Heat Release	Natural	
Size	170x120x60mm	440x270x43.6mm
Environment		
Working Temperature	-40°C ~ 85°C	

Storage temperature	-40°C ~ 85°C
Relative Humidity	5%-95% (no condensation)
Certification	
Safety	EN62368
EMC	EN55032 Class A, FCC part 15 Subpart B Class A EN 61000-3-2 Class A EN 61000-3-3 Class A EN 61000-4-2 Level 4 Contact: 8kV ,Air: +15kV EN 61000-4-3 Level 4 EN 61000-4-4 Level 4 Power: ±4kV; Signal: ±2kV EN61000-4-5 Power: 6kV, Copper: Comm 4kV, diff. 2kV EN 61000-4-6 Level 3 EN 61000-4-8 Level 4 30A/m EN 61000-4-11 Voltage dip/interruption
RoHS	RoHS 2.0
Reliability	
Shock	IEC 60068-2-27
Free fall	IEC 60068-2-32
Vibration	IEC 60068-2-6

Software Feature

L2 Feature	
Port Feature	IEEE802.3x Flow control , Interface counters, Storm control, DDM
Port Isolate	support
Link Aggregation	Static aggregation, Dynamic aggregation (LACP)
Port Mirror	Port-based mirror
Spanning Tree	STP, RSTP, MSTP
VLAN	4094 VLAN, Port-Base VLAN
MAC Address	IEEE 802.1q, MAC 16K Static mac-address, Dynamic mac-address, mac-address Filtering , IVL mode
QinQ	Port-based QinQ, Vlan-based QinQ, Flow-Based QinQ, 1:1 VLAN Mapping
LLDP	LLDP, LLDP-MED
ERPS(G.8032)	Single-ring, sub-ring, multi-ring

Multicast	IGMP V1 Snooping, IGMP V2 Snooping, IGMP V3 Snooping, IGMP Fast Leave, Static Multicast Entry
L3 Feature	
ARP	Static ARP, Dynamic ARP, ARP proxy
Routing strategy	IP Prefix-list, IP ACL, Route-Map
IPv4	Static route, Support Blackhole route OSPF, RIP, ISIS, BGP route protocol
Security Features	
ACL	IP Standard ACL, MAC extend ACL, IP extendACL
QoS	QoS Class, Remarking SP, WRR, SP+WR queue scheduling Ingress Port-based Rate-limit Egress Port-based Rate-limit Policy-based QoS
Dot1x	Port Access Control, Mac-address Access Control, RADIUS Server
Management Feature	
User management	password protection
SNMP	SNMP v1/v2c/v3
RMON	Statistics Group, History Group, Alarm Group, Events Group
Web Management	Web, support HTTP V1.1
Firmware Upgrade	support
Syslog/Debug	support
IPv4/IPv6	support
PoE Management	support 802.3af/at, PoE enable/disable, watchdog, info check
Diagnosis	ping(ipv4), ping(ipv6), Trace route(ipv4), Trace route(ipv6)
Application	
NTP	NTP Client
TFTP	TFTP Client
Telnet	Telnet Server, Telnet Client
DHCP	DHCPv4 Snooping (Trust Port) DHCPv4 Client, DHCPv6 Client, DHCPv4 Server, DHCPv6 Server

Order Information

Model No.	Description
IMS5300-8T4X	L3, 8x 10/100/1000M RJ45, 4x 10G SFP+
IMS5300-8P4X	L3, 8x 10/100/1000M PoE, 4x 10G SFP+
IMS5300-8B4X	L3, 8x 10/100/1000M PoE(bt), 4x 10G SFP+
IMS5300-8T2S4X	L3, 8x 10/100/1000M RJ45, 2x 1G SFP, 4x 10G SFP+
IMS5300-8P2S4X	L3, 8x 10/100/1000M PoE, 2x 1G SFP, 4x 10G SFP+
IMS5300-8B2S4X	L3, 8x 10/100/1000M PoE(bt), 2x1G SFP, 4x 10G SFP+
IMS5300-24T4X-2A	L3, 24x 10/100/1000M RJ45, 4x 10G SFP+, Dual AC input
IMS5300-16T8C4X-2A	L3, 16x 10/100/1000M RJ45, 8x 1G Combo, 4x 10G SFP+, Dual AC input
IMS5300-16S8C4X-2A	L3, 16x 1G SFP, 8x 1G combo, 4x 10G SFP+, Dual AC input
IMS5300-16P8C4X-AC	L3, 16x 10/100/1000M PoE, 8x 1G Combo, 4x 10G SFP+, AC input

Related Products

SFP modules

Model No.	Description
SFP-M1285L-05I	SFP 1.25G MM 850nm LC 550m DDM, Industrial Grade
SFP-S1213L-20I	SFP 1.25G SM 1310nm LC 20km DDM, Industrial Grade
SFP-B1235L-20I	SFP 1.25G SM TX1310/RX1550nm LC 20km DDM, Industrial Grade
SFP-B1253L-20I	SFP 1.25G SM TX1550/RX1310nm LC 20km DDM, Industrial Grade
SFP-M1085L-03I	SFP+ 10G MM 850nm LC 300m DDM, Industrial Grade
SFP-S1013L-20I	SFP+ 10G SM 1310nm LC 20km DDM, Industrial Grade
SFP-B1023L-20I	SFP+ 10G SM TX1270/RX1330nm LC 20km DDM, Industrial Grade
SFP-B1032L-20I	SFP+ 10G SM TX1330/RX1270nm LC 20km DDM, Industrial Grade

Notes: 40/60/80km available

DIN rail Power Supply

Model No.	Description
HDR-15-24	DIN rail 15W, 85~264Vac input, 24Vdc 0.63A output
HDR-30-24	DIN rail 36W, 85~264Vac input, 24Vdc 1.5A output
HDR-60-24	DIN rail 60W, 85~264Vac input, 24Vdc 2.5A output
NDR-75-48	DIN rail 75W, 90~264Vac input, 48Vdc 1.6A output
NDR-120-48	DIN rail 120W, 90~264Vac input, 48Vdc 2.5A output
NDR-240-48	DIN rail 240W, 90~264Vac input, 48Vdc 5A output
NDR-480-48	DIN rail 480W, 90~264Vac input, 48Vdc 10A output

Installation Kits

Model No.	Description
 <p>TK12</p>	Wall-mounted kit, 118*18*16mm, φ3.5mm L=12mm
 <p>A01</p>	Side DIN rail kit, 84*81.5*8.5mm, φ3.5mm L=6mm
 <p>CK01</p>	Rack-mounted bracket, 483*215*130mm



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