DCN Europe

Switch to
a New Generation

INDUSTRIAL SWITCHES
IS2100D SERIES

- IS2100D-2GF8TX (R2)
- IS2100D-2GF8TX-P (R2)
- IS2100D-2GF8GT (R2)
- IS2100D-2GF8GT-P (R2)

Resistance to Industrial Conditions

Network Security

Network Protection

Advanced Management

PoE/PoE+ Support

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RESISTANCE TO INDUSTRIAL CONDITIONS

- With the fanless technology and reinforced housing, industrial solutions offer increased resistance to damage with maintaining the IP40 protection class, meets industry standards.
- IS2100D series solutions are characterized by a wide operating temperature range (from -40°C to 85°C), guaranteeing uninterrupted operation in extreme conditions, where classic solutions are damaged very quickly.

NETWORK SECURITY

- IP Source Guard provides Layer 2 source IP address filtering to prevent spoofing of an unauthorized host uses authorized hosts IP address. This feature uses dynamic DHCP Snooping and a static input of the source IP address.
- The IS2100D series support DHCP Snooping which prevent attacks with using an illegal DHCP server by setting trusted ports and unused ports. By enabling DHCP Snooping Binding and DHCP option 82, you can combine modules such as dot1x and ARP DAI or independently implement user access control.
- Access control list (ACL) can be used to restrict access to sensitive network resources by filtering packets and forwarding according to established rules. The user-defined ACL provides more flexible access control for users.
- The IS2100D series supports much more L2 security features such as ARP protection, ARP scanning and other ARP and MAC security technologies to protect network security and reliability.

ADVANCED MANAGEMENT

- Advanced administration of DCN switches. Network solutions configured via the well-known command line interface (CLI) or the easy-to-use Web-based graphical interface.
- Network traffic monitoring using sFlow or SNMP protocols..

NETWORK PROTECTION

- The IS2100D series supports 4 Gigabit ports as an uplink, which can work as redundant links working with various ring protection functions, effectively increasing the scalability and network performance.
- G.8032 (ERPS) with a 50ms network structure switching time provides protection in the event of a connection failure and re-recovery of L2 layer traffic in ring topology. The IS2100D series supports G.8032 v2 and can be implemented in a variety of complex network topologies, including single ring, tangential ring, and intersecting rings.
- The multiple spanning tree protocol (MSTP) allows the introduction of many logical network topologies - instances to which multiple VLANs can be assigned - resulting in redundant and stable Ethernet transmission.
- MRPP is a authorial DCN protocol offering ring protection. Compared to the STP protocol, it has faster convergence (50ms), a simple algorithm and a lower cost of system resources used, which improve network reliability.

POE/POE+ SUPPORT

- With the technology described by the IEEE 802.3af and IEEE 802.3at standards, the IS2100D series devices are perfect for supplying power with Ethernet transmission through copper cabling to end devices such as IP cameras (CCTV), external access points or various information boards.
- Auto-reset PoE functionality offers the possibility of automatic, temporary disconnection of PoE on a given switch port in case the end device does not respond to the request (ping).

IS2100D	2GF8TX (R2)	2GF8TX-P (R2)	2GF8GT (R2)	2GF8GT-P (R2)
Switch classification				
Layer 2	✓	✓	✓	✓
Connectivity				
10/100Base-TX (RJ45)	8	–	–	–
10/100Base-TX (RJ45) with PoE	–	8	–	–
10/100/1000Base-T (RJ45)	–	–	8	–
10/100/1000Base-T (RJ45) with PoE	–	–	–	8
100/1000Base-X (SFP)	2	2	2	2
Console port – RS-232 (RJ45)	✓	✓	✓	✓
Performance				
Switch fabric speed	5,6 Gb/s	5,6 Gb/s	20 Gb/s	20 Gb/s
Forwarding rate	4,16 Mp/s	4,16 Mp/s	14,88 Mp/s	14,88 Mp/s
Packet buffer	0,5 MB	0,5 MB	0,5 MB	0,5 MB
Jumbo frame	10 K	10 K	10 K	10 K
Mac address table [(1)]	8 K	8 K	8 K	8 K
Multicast MAC address table	500	500	500	500
ACL table	1,4 K	1,4 K	1,4 K	1,4 K
Nomber of vlan interfaces (IP)	16	16	16	16
CPU clock	400 MHz	400 MHz	400 MHz	400 MHz
Flash memory	32 MB	32 MB	32 MB	32 MB
RAM memory	128 MB	128 MB	128 MB	128 MB
Resilience and avvailability				
IEEE 802.1D STP/802.1w RSTP/802.1s MSTP	✓	✓	✓	✓
IEEE 802.3ad LACP	✓	✓	✓	✓
Virtual Cable Testing	✓	✓	✓	✓
DDM	✓	✓	✓	✓
LLDP / LLDP-MED	✓	✓	✓	✓
Loop guard	✓	✓	✓	✓
ERPS (ITU-T G.8032)	✓	✓	✓	✓
MRPP	✓	✓	✓	✓
ULPP	✓	✓	✓	✓
Traffic control				
IEEE 802.3x Full duplex & Flow control	✓	✓	✓	✓
802.1Q VLANs	4 K	4 K	4 K	4 K
Port-based VLAN	✓	✓	✓	✓
Protocol-based VLAN	✓	✓	✓	✓
IP subnet based VLAN	✓	✓	✓	✓
Voice VLAN	✓	✓	✓	✓
Mac VLAN	✓	✓	✓	✓
LACP algorithm of source/destination IP (load balance)	✓	✓	✓	✓
GVRP	✓	✓	✓	✓
802.1ad Vlan Stacking (QinQ)	✓	✓	✓	✓
Selective QinQ	✓	✓	✓	✓
Flexible QinQ	✓	✓	✓	✓
Security				
Layer 2 MAC filtering	✓	✓	✓	✓
BPDU Tunnel	✓	✓	✓	✓
BPDU Guard	✓	✓	✓	✓
Login authentication and authorization by RADIUS and TACACS+	✓	✓	✓	✓
TACACS+ accounting/ auditing	✓	✓	✓	✓
SSH v1/v2	✓	✓	✓	✓
DHCP/DHCPv6 snooping	✓	✓	✓	✓
IP/IPv6 Source Guard	✓	✓	✓	✓
Port security	✓	✓	✓	✓
IEEE 802.1x port-based / mac-based	✓	✓	✓	✓
QoS				
802.1p Priority Queues per Port	8	8	8	8
802.1p Queuing method	✓	✓	✓	✓
Trusted COS/TOS/IP Precedence/DSCP/Port number	✓	✓	✓	✓
Broadcast Storm Control	✓	✓	✓	✓
Rate Limiting, port based	✓	✓	✓	✓
Strict priority	✓	✓	✓	✓
Weighted Round Robin	✓	✓	✓	✓
Weighted Deficit Round Robin	✓	✓	✓	✓
Strict priority in Weighted Round Robin	✓	✓	✓	✓

[(1)] - MAC address Table shared for unicast and multicast (in 1:1 ratio)

IS2100D	2GF8TX (R2)	2GF8TX-P (R2)	2GF8GT (R2)	2GF8GT-P (R2)
L2/L3 - Multicast				
Multicast VLAN	✓	✓	✓	✓
IGMP v1,v2, v3	✓	✓	✓	✓
IGMP Query	✓	✓	✓	✓
IGMP Snooping (v1,v2,v3)	✓	✓	✓	✓
IGMP Snooping Fast Leave(v2,v3)	✓	✓	✓	✓
IPv6 MLD v1/v2 Snooping	✓	✓	✓	✓
Manageability				
GUI (Web)	✓	✓	✓	✓
Telnet	✓	✓	✓	✓
SNMP v1/V2c/v3	✓	✓	✓	✓
TFTP/FTP	✓	✓	✓	✓
Configuration backup and restore	✓	✓	✓	✓
Multilevel CLI	✓	✓	✓	✓
DHCP Client/Relay/Server	✓	✓	✓	✓
DHCP relay per VLAN	✓	✓	✓	✓
DHCP option 43/60/82	✓	✓	✓	✓
DHCPv6 option 37/38	✓	✓	✓	✓
DHCPv6 Relay/Server	✓	✓	✓	✓
SNTP / NTP	✓	✓	✓	✓
sFlow	✓	✓	✓	✓
Port Mirroring per IP/TCP/UDP	✓	✓	✓	✓
RSPAN	✓	✓	✓	✓
IEEE 802.3ah EFM	✓	✓	✓	✓
IEEE 802.1ag CFM	✓	✓	✓	✓
MIB				
RFC1066 – TCP/IP-based MIB	✓	✓	✓	✓
RFC1213, 1157 – SNMPv2c/v3 MIB	✓	✓	✓	✓
RFC1493 – bridge MIB	✓	✓	✓	✓
RFC2674 – bridge MIB extension	✓	✓	✓	✓
RFC1643 – ethernet MIB	✓	✓	✓	✓
RFC1757 – RMON group 1,2,3,9	✓	✓	✓	✓
RFC2925 – Remote Management MIB	✓	✓	✓	✓
RFC2233 – SMIv2 MIB	✓	✓	✓	✓
Physical				
Dimensions (Width x Height x Depth)	165 mm x 60 mm x 140 mm	165 mm x 60 mm x 140 mm	165 mm x 60 mm x 140 mm	165 mm x 60 mm x 140 mm
Operating temperature	-40 °C ~ 85 °C	-40 °C ~ 85 °C	-40 °C ~ 85 °C	-40 °C ~ 85 °C
Humidity	10% - 95% (no condensation)	10% - 95% (no condensation)	10% - 95% (no condensation)	10% - 95% (no condensation)
IP class protection	IP40	IP40	IP40	IP40
Cooling	passive	passive	passive	passive
Electrical				
PoE standards	–	IEEE 802.3at IEEE 803.3af	–	IEEE 802.3at IEEE 803.3af
PoE power budget	–	240W	–	240W
Power supply	48V DC	(50~57)V DC	48V DC	(50~57)V DC
Redundant Power supply	48V DC	(50~57)V DC	48V DC	(50~57)V DC
Power consumption	10W	250W	10W	250W