6 PORT GIGA - UPOE
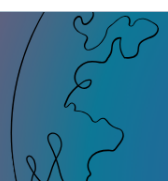
INDUSTRIAL L2 MANAGED SWITCH

DDSPMG SERIES

SYNOPSIS

- THE DDPSMG 304 2S 360 HI IS A HIGH PERFORMANCE L2+ MANAGED ETHERNET SWITCH WITH 4 X 10/100/1000TX RJ45 COPPER PORTS WITH 4 X 802.3BT POE AND 2 X 1000M SFP PORTS, WHICH MEETS THE HIGH RELIABILITY REQUIREMENTS DEMANDED BY INDUSTRIAL ROLLING STOCK APPLICATIONS

- IT PROVIDES L2 WIRE SPEED AND ADVANCED SECURITY FUNCTION FOR NETWORK AGGREGATION DEPLOYMENT. IT DELIVERS ENHANCED RING RECOVERY LESS THAN 20MS IN SINGLE RING. FOR MORE USAGE FLEXIBILITIES, IPSMG 304-2S 360 HI SUPPORTS WIDE OPERATING TEMPERATURE FROM -40 TO 75°C

- SUPPORT ZERO-TOUCH PROVISIONING (ONLY FOR IPV6), IT ALLOWS REMOTELY DEPLOYMENT AND CONFIGURATION OF MULTI-SITE NETWORKS, SO THERE'S NO NEED TO SEND OUT AN ENGINEER FOR ON-SITE CONFIGURATION, TO ENSURES EFFICIENT DEPLOYMENT WITH LOWER COSTS

FEATURES & BENEFITS

- CONFORMS TO IEEE802.3, 802.3U, 802.3AB, 802.3Z, 802.3AF, 802.3AT, 802.3BT-TYPE4
- PROVIDE 8 X 10/100/1000TX RJ45 COPPER PORTS AND 2 X 1000M SFP PORTS
- PROVIDE 4 X 802.3BT POE
- POE BUDGET 360W
- HIGH BACK-PLANE BANDWIDTH 12GBPS
- SUPPORT ICMPV6
- SUPPORT IPV6 NEIGHBOR DISCOVERY
- SUPPORT IPV6 TELNET
- SUPPORT MLD SNOOPING
- SUPPORT STANDARD IP/ EXTEND IP / MAC IP / ARP ACL
- SUPPORT IGMP SNOOPING FOR MULTI-MEDIA APPLICATION
- SUPPORT PORT MIRROR AND BANDWIDTH CONTROL
- SUPPORT IEEE802.3X FLOW CONTROL
- SUPPORT PORT BASED VLAN / 802.1Q TAG VLAN
- SUPPORT IEEE802.3AD PORT TRUNK WITH LACP
- SUPPORT SPANNING TREE PROTOCOL IEEE802.1D/802.1W/802.1S
- SUPPORT IEEE 802.1P CLASS OF SERVICE
- SUPPORT IEEE 802.1X USER AUTHENTICATION
- SUPPORT BROADCAST STORM FILTER
- SUPPORT SYSTEM EVENT LOG
- SUPPORT COMMAND LINE INTERFACE MANAGEMENT
- SUPPORT ZERO-TOUCH PROVISIONING (ONLY FOR IPV6)
- MANAGEMENT BY WEB / SNMP / SSH / TELNET (IPV6 READY) / CONSOLE
- SURGE PROTECTION FOR POWER PORT AND DATA PORTS
- WIDE POWER INPUT: 44 TO 57VDC
- WIDE WORKING TEMPERATURE: -40 TO 75°C
- IP30 ALUMINUM CASE
- 200,000 HOURS MTBF (PARTS COUNT RELIABILITY PREDICTION)

TECHNICAL SPECIFICATIONS

ATTRIBUTES

Networking Interfaces	4 10/100/1000M RJ45 Copper ports. 2 1000M SFP ports.
Management Interface	RJ45 Console port
LED Indicators	Power, Link/Act, PoE

COPPER CABLE

10Base-T	2-pair UTP/STP Cat. 3,4,5/5E,6 cable EIA/TIA-568 100-ohm (100m)
100Base-T	2-pair UTP/STP Cat. 5/5E,6 cable EIA/TIA-568 100-ohm (100m)
1000Base-T	4-pair UTP/STP Cat. 5E,6 cable EIA/TIA-568 100-ohm (100m)

PERFORMANCE

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Switching Capacity	12 Gbps
Forwarding Capacity	8.93 Mpps
Forwarding Mode	Store and Forward
Packet Buffer Memory	4.1 Mbit
RAM for CPU	1 Gbit
Flash Memory	128 Mbit
MAC Address Table	8K
Max. Jumbo Frame size	16K
VLAN Quantity	4K
ACL Table	512
L3 Interface	32
Port Queues	8
PoE Budget	360W

PHYSICAL

Dimensions	147.5x143x60mm
Weight	3KG
Operating Temperature	-40 to 75℃
Storage Temperature	-40 to 75℃
Operating Humidity	5 to 95% Noncondensing
Power Method	44 to 57VDC
Max. Power Consumption	Including PoE Output: 375W Excluding PoE Output: 15W

POWER OVER ETHERNET

PoE Interfaces	Ports 1-4
PoE Standard	IEEE802.3af, IEEE802.3at, IEEE802.3bt-type4
Max. PoE Wattage per Port	90W
PoE Voltage	52VDC (Depend on Power Adapter)
PoE Pin Assignment	V- (RJ45 Pin1,2,7,8), V+ (RJ45 Pin 3,4,5,6) for 802.3bt PoE
PoE Management	Port-base PoE status view and control, PoE Schedule, PD Alive Auto Check

PORT CONFIGURATION

Enable and Disable	Support control enable and disable
Auto-Negotiation	Support force port mode and speed
Flow Control	Support IEEE802.3x full-duplex Support half-duplex backpressure
Storm Control	Support broadcast, multicast and DLF package rate limit
Port Mirroring	Support many to one mirroring
Rate Limit	Support Port input and output rate limit
Link Aggregation	Support manual Link Aggregation Support LACP Up to 8 maximum aggregation groups, each containing up to 8 ports
Aggregation Strategy	Source MAC / Destination MAC / Source Destination MAC Source IP / Destination IP / Source Destination IP
Port Protection	Each port can be configured into isolated protected port from each other
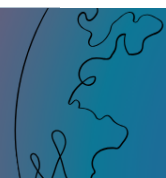
MAC CONFIGURATION

MAC Address Table Management	Support
Transfer Mode	Support IVL transfer mode
Static MAC Address	Support
MAC Binding	Support
MAC Address Filter	Support
MAC Quantity Limitation	Support limit the number of MAC-addresses Learning per port

VLAN CONFIGURATION

VLAN Based on 802.1Q	Support
MAC-Based VLAN	Support
IP-Based VLAN	Support
Protocol-Based VLAN	Support
Voice VLAN	Support
Guest VLAN	Support
Private VLAN	Support
VLAN Mapping	Support 1:1 mapping
Double VLAN Markup	Support basic QinQ

RELIABILITY PROTOCOL

Spanning Tree	Support STP/RSTP/MSTP
BPDU Guard	Support
BPDU Filter	Support
Port Loop Detection	Support
EAPS Protocol	Support RFC3619
ERPS Protocol	Support G.8032/Y.1344
LLDP Protocol	Support LLDP and LLDP-MED
UDLD Protocol	Totally compatible with UDLD protocol of CISCO

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HOST ROUTING

Static ARP	Support
Static Routing	Support

MULTICAST

Static Multicast MAC Address	Support
IGMP SNOOPING	Support
MVR	Support
GMRP	Support

ACCESS CONTROL LIST (ACL)

Based on Standard IP	Support
Based on Extend IP	Support
Based on MAC IP	Support
Based on MAC ARP	Support
Based on time	Support
Port Filtering	Support

QUALITY OF SERVICE (QOS)

Scheduling Mode	Support WRR, SP, WFQ
Sorting Based on Port	Support
Sorting Based on 802.1p	Support
Sorting Based on DSCP	Support
Sorting Based on ACL Data Flow	Support
QoS Strategy	Support packet mapped to the corresponding output queue Support to modify the packet's COS and DSCP sign Support limit of data flow Support statistics of data flow Support mirroring of data flow

SECURITY

|	
Administrative Security	Support start and end TELNET, WEB and SNMP serve Support TELNET, WEB and SNMP serve binding with Standard IP ACL Support control the number of user for TELNET
CPU Protect	Switch self-security protect, forbid flow attack
IP-MAC Address Binding	Support binding between static configuration IP, MAC and Port
AAA	Support 802.1x protocol Support RADIUS protocol Support RADIUS server authentication authorization and bill Support MAC-based 802.1X authentication. Support 802.1x guest VLAN
DHCP SNOOPING	Support dynamic ARP binding to prevent ARP spoofing Support dynamic IP, MAC port binding Support stationary port connect to DHCP server, to prevent privately connect to DHCP sever
Prevent ARP Spoofing	Support manual configure ACL rule based on MAC ARP prevent ARP spoofing Support DHCP SNOOPING function, switch dynamically binding ARP and port, when the DHCP get IP address , to prevent ARP spoofing

IPV6

ICMPv6	Support
IPv6 Neighbor Discovery	Support
MLD Snooping	Support
IPv6 Telnet	Support

MANAGEMENT FEATURES

CLI Management	Support serial port management Support TELNET management Support SSH management
WEB Management	Support
SNMP Management	Support SNMP protocol Support SNMP TRAP Support standard and private MIB
User management	Support multi-user management
Show CPU Utilization	Support
Show RAM Utilization	Support
TACACS+	Support TACACS+ server remote user name and password authentication Support PAP and CHAP password encryption Support TACACS+ server command authorization
Log Management	Support
RMON	Support RMON 1,2,3,9 group
Cluster Management	Support neighbor discovery protocol Support topology discovery protocol Support manual and automated join cluster group Support cluster unification management
OAM	Support 802.3ah Support 802.1ag
Configuration Download / Upload	Support
ZTP	Support Zero-Touch Provisioning (only for IPv6)

DEBUGGING TOOLS

PING	Support
TRACEROUTE	Support
TELNET Client	Support
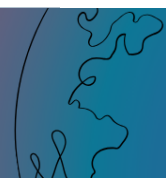
ORDERING CODE

DDPSMG 304 2S 360 HI

DDPSMG	PoE L2 Managed Industrial Ethernet Switch
304	4 * bt PoE Giga Copper Ports
2S	2 * Giga Fiber SFP Slots
360	360W Ethernet Switch
	90W per port
Hi	Fixed