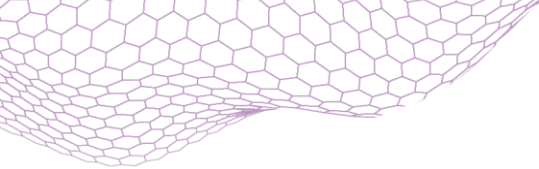


16 PORT LAYER 2+ INDUSTRIAL GRADE PTP/MRP MANAGED SWITCH-GIGA

DDSMG PM SERIES





SYNOPSIS

- DDSMG 3012-4S PM IS AN INDUSTRIAL-GRADE ETHERNET SWITCH DESIGNED WITH ADVANCED PRECISION TIME PROTOCOL (PTP) CLOCK SYNCHRONIZATION AND MRP CAPABILITIES.
- THIS PRODUCT IS SPECIFICALLY DEVELOPED FOR INDUSTRIAL APPLICATIONS THAT DEMAND STRICT DELAY FORWARDING REQUIREMENTS FOR ETHERNET TRAFFIC.
- IT SUPPORTS HARDWARE-BASED TIMESTAMPING IN COMPLIANCE WITH IEEE 1588 AND IEEE 802.1AS STANDARDS AND OFFERS MULTIPLE CLOCK OPERATION MODES INCLUDING BOUNDARY CLOCK (BC), TRANSPARENT CLOCK (TC), AND ORDINARY CLOCK (OC).
- THE SWITCH IS ENGINEERED TO DELIVER HIGH RELIABILITY, HIGH AVAILABILITY, AND HIGH-PRECISION TIME SYNCHRONIZATION IN LOW-LATENCY AND HIGH-BANDWIDTH ENVIRONMENTS.
- IT IS IDEALLY SUITED FOR APPLICATIONS SUCH AS INDUSTRIAL IIOT, SMART GRID, SMART FACTORY, SMART CITY, AND INTELLIGENT TRANSPORTATION SYSTEMS.
- THE DDSMG 3012-4S PM MEETS THE PERFORMANCE REQUIREMENTS OF INDUSTRIAL VIDEO, VOICE, AND DATA TRANSMISSION APPLICATIONS.

FEATURES

- PROVIDES 12 × 10/100/1000 MBPS AUTO-ADAPTIVE RJ45 PORTS.
- EQUIPPED WITH 4 SFP SLOTS, SUPPORTING SELECTION OF 2.5G, 1.25G (GIGABIT), OR 100 MBPS MODULES.
- SUPPORTS MULTIPLE ETHERNET LINK REDUNDANCY RING PROTOCOLS, INCLUDING STP, RSTP, MSTP, ERPS, AND MRP.
- ENABLES FLEXIBLE NETWORK TOPOLOGIES SUCH AS SINGLE RING, TANGENT RING, AND INTERCONNECTED RING.
- PROVIDES FAST REDUNDANCY SWITCHING WITH A RECOVERY TIME OF ≤ 50 MS, ENSURING MINIMAL NETWORK DISRUPTION.
- SUPPORTS LAYER 2 ETHERNET FEATURES INCLUDING VLAN, QUALITY OF SERVICE (QOS), MULTICAST, AND RING NETWORK PROTOCOLS.
- PROVIDES HIGH-PRECISION TIME SYNCHRONIZATION BASED ON IEEE 1588 PTP AND IEEE 802.1AS STANDARDS.
- OFFERS MULTIPLE MANAGEMENT ACCESS METHODS, INCLUDING CLI, WEB-BASED INTERFACE, TELNET, AND SSH.

TECHNICAL SPECIFICATIONS

Interface	12 *10/100/1000Base-T RJ45 4 SFP slots 2 Port supports optional 2.5G, 1.25G, or 100M 2 Port supports 1.25G or 100M Supports DDM diagnostic function
IEEE Standards	802.1D, 802.1p, 802.1Q, 802.1s, 802.1w, 802.3ab, 802.3ad, 802.3x, 802.3z, 802.3az, 803.2ae, G.8032, IEEE1588
Performance	MAC Address : 8K Bandwidth : 36Gbps Packet Buffer Size : 4M Delay Time : 5μs (Normal, not in Time-Synchronization Mode) Transmission Mode : Store and Forward Jumbo Frame : Support 9600 Bytes
Management Port	RS232 interface, RJ45, 115200bps, 8, N, 1)
Indicator	Power, Operation, Alarm, Fiber Port and Copper Port Indicator
Reset Button	Support one click reset button, long press for 10 seconds
MTBF	> 300,000 hours

SOFTWARE FEATURES

System Information	Equipment panel graphical overview Equipment and system information CPU status information IPv4, IPv6 interface and routing status information Support log record
System Management	Support system information configuration Support system user management and user level management Support IPv4 and IPv6 Management interface configuration and management interface Support IP Route gateway Support SNMPv1/v2/v3 protocol, Web and Telnet access management Support LLDP Link Discovery Protocol
Network Clock	Support NTP Protocol and Network host time synchronization Support 1588, 802.1AS and on-board AS clock protocol Support transparent clock, boundary clock, master clock, slave clock and other modes

Layer 2 Management

Support port status, port traffic statistics, port priority status and other details and management control
Support SFP optical module DDM diagnostic information function
Supports port VLAN and VLAN Tag modes.
supports Access, Trunk, and Hybrid modes
Support private PVLAN, voice VLAN.
Support GVRP Dynamic VLAN
Support VLAN based on MAC, Protocol, IP subnet or stream
Support QoS, DSCP based mapping and SP scheduling algorithms, and credit-based algorithms
Support port aggregation function based on static and LACP
Support IGMP snooping multicast
Support multicast LAN auto registration MVR function
Support MVRP multi VLAN registration protocol based on MSTI

Ring Network Redundancy

Support RSTP, MSTP
Support MRP Media Redundancy Protocol
Support ERPSv2 Redundancy Protocol
Support APS Automatic Loop Switching Protocol

Layer 3 Route

Support Static Route

Security

Support SSH and HTTPS based secure WEB configuration access
Support RMON statistics, events and alarms
Support port security and Port +VLAN + MAC binding function
Support network access service control, RADIUS, Guest VLAN
Support ACL (Access Control List)
Support access control based on IPv4, IPv6, protocol and port Static IP source address protection function
Support Static and dynamic ARP protection function
Support AAA Protection

Device Management

Support SNMPv1/v2/v3 protocol, Web and Telnet access management, and LLDP
Support DHCP Snooping and DHCP server management
Support Port mirroring
Support "sFlow" flow sampling function
Support configuration of download and upload functions

Network Maintenance

Support CFM connectivity detection function, Loopback function and link tracking function
Support Ping and Traceroute diagnosis
Link OAM Management

POWER

Input voltage	DC9 to 56V or AC85 to 264 / DC110 to 370V optional Redundant power input.
Interface Type	5-Pin 5.08 pitch Phoenix terminal blocks
Overload Voltage Protection	Support
Overload Current Protection	Support
Reverse Polarity Protection	Support
Alarm	DC24V@1A 3-Pin Phoenix terminals with 5.08 pitch, supporting Dual alarms
Power consumption	DC12V@1.3A Power consumption ≤15W (Normal Value)

PHYSICAL CHARACTERISTICS

Dimension	154* 127* 54mm
Installation	DIN rail

ENVIRONMENTAL

Working Temperature	-40 to +75°C
Storage Temperature	-40 to +85°C
Operating Humidity	5% to 95% RH Noncondensing

ORDERING CODE

DDPSMG 3012-4S PM

DDPSMG	Industrial Grade L2+ Giga Managed Switch
3012	12x10/100/1000M RJ45 ports
4S	4 SFP slots, 2 Port supports optional 2.5G, 1.25G, or 100M, 2 Port supports 1.25G or 100M.
PM	PTP/MRP Protocol supported.