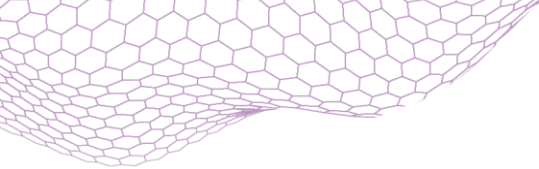


12 PORT LAYER 2+

INDUSTRIAL ETHERNET MANAGED SWITCH-GIGA POE

DDPSMG SERIES





SYNOPSIS

- THE DDPSMG 308-4S CF IS A 12-PORT, FULL-GIGABIT, LAYER 2 MANAGED INDUSTRIAL POE ETHERNET SWITCH.
- IT IS EQUIPPED WITH 8 × 10/100/1000BASE-T POE PORTS AND 4 × 100/1000BASE-X SFP FIBER PORTS.
- PORTS 1–8 SUPPORT IEEE 802.3AF/AT POE/POE+ STANDARDS, DELIVERING UP TO 30 W PER PORT
- MAXIMUM TOTAL POE POWER BUDGET OF 240 W.
- THE SWITCH AUTOMATICALLY DETECTS AND IDENTIFY POWERS COMPLIANT POE DEVICES, ENABLING EFFICIENT POWER AND DATA TRANSMISSION OVER A SINGLE ETHERNET CABLE
- IT IS WELL SUITED FOR POWERING POE-ENABLED TERMINAL DEVICES SUCH AS WIRELESS ACCESS POINTS, IP CAMERAS, VOIP PHONES, AND INDUSTRIAL SENSORS.
- HOUSED IN A ROBUST IP40 INDUSTRIAL-GRADE ALUMINUM ALLOY ENCLOSURE
- SUPPORT DUAL REDUNDANT POWER INPUTS, FANLESS DESIGN, AND LOW POWER CONSUMPTION
- THE DDPSMG 308-4S CF IS IDEALLY SUITED FOR INDUSTRIAL APPLICATIONS INCLUDING INTELLIGENT TRANSPORTATION SYSTEMS, RAIL TRANSIT, POWER UTILITIES, MINING, OIL AND GAS ETC.,

FEATURES

- SUPPORTS NON-BLOCKING, WIRE-SPEED PACKET FORWARDING FOR HIGH-PERFORMANCE DATA TRANSMISSION.
- SUPPORTS FULL-DUPLEX COMMUNICATION BASED ON IEEE 802.3X FLOW CONTROL AND HALF-DUPLEX OPERATION BASED ON BACKPRESSURE.
- SUPPORTS STP, RSTP, MSTP, AND ERPS PROTOCOLS TO ENSURE RAPID NETWORK RECOVERY
- SUPPORTS BOTH STATIC AND DYNAMIC LINK AGGREGATION TO IMPROVE BANDWIDTH UTILIZATION AND LINK REDUNDANCY.
- COMPLIES WITH IEEE 802.1Q VLAN, SUPPORTING FLEXIBLE VLAN CONFIGURATIONS INCLUDING ACCESS, TRUNK, AND HYBRID MODES.
- ADVANCED QOS CAPABILITIES WITH PRIORITY CLASSIFICATION BASED ON 802.1P, PORT, AND DSCP, AND MULTIPLE QUEUE SCHEDULING ALGORITHMS INCLUDING EQU, SP, WRR, AND SP+WRR.
- SUPPORTS IGMP SNOOPING V1/V2/V3, MEETING THE REQUIREMENTS OF MULTI-TERMINAL HD VIDEO SURVEILLANCE AND VIDEO CONFERENCING APPLICATIONS.
- SUPPORTS ACL (ACCESS CONTROL LISTS) TO FILTER DATA PACKETS THROUGH CONFIGURABLE MATCHING RULES, OPERATION POLICIES, AND TIME-BASED PERMISSIONS, PROVIDING SECURE AND FLEXIBLE ACCESS CONTROL.
- SUPPORTS IEEE 802.1X AUTHENTICATION FOR ENHANCED NETWORK SECURITY.
- SUPPORTS PORT ISOLATION AND STORM CONTROL TO PROTECT THE NETWORK FROM BROADCAST STORMS AND UNAUTHORIZED TRAFFIC.
- IP–MAC–VLAN–PORT BINDING TO PREVENT IP SPOOFING AND ENHANCE NETWORK ACCESS SECURITY.
- SECURE MANAGEMENT ACCESS SUPPORTING HTTPS, SSLV3, AND SSH (V1/V2).
- COMPREHENSIVE NETWORK MONITORING AND DIAGNOSTICS, INCLUDING RMON, SYSTEM LOGS, LLDP, AND DETAILED PORT TRAFFIC STATISTICS.
- SUPPORT CPU AND MEMORY UTILIZATION MONITORING, PING TESTING, AND CABLE DIAGNOSTICS.
- FLEXIBLE MANAGEMENT INTERFACES, SUPPORTING WEB-BASED MANAGEMENT, CLI ACCESS (CONSOLE AND TELNET), AND SNMP (V1/V2/V3)

TECHNICAL SPECIFICATIONS

INTERFACE

Fixed Port	8 * 10/ 100/ 1000Base-T PoE Ports 4 * 100/ 1000Base-X uplink SFP slot ports 1 * RS232 console port
Ethernet Ports	Port 1-8 support 10/ 100/ 1000Base-T auto-sensing, full/half duplex MDI/MDI-X self-adaption
Twisted Pair Transmission	10BASE-T: Cat3,4,5 UTP (≤100 meters) 100BASE-TX: Cat5 or later UTP (≤100 meters) 1000BASE-T: Cat5e or later UTP (≤100 meters)
SFP Slot Port	Gigabit SFP optical Fiber interface
Wavelength/Distance	Multimode: 850nm 0 to 550M, 1310nm 0 to 2KM Single mode: 1310nm 0 to 40KM, 1550nm to 120KM

HARDWARE FEATURES

Network Management Type	L2+
Ring network	Supports ERPS ring network function, with a maximum number of rings of 5 and a convergence time of <20ms
Network Protocol	IEEE802.3 10BASE-T, IEEE802.3i 10Base-T, IEEE802.3u 100Base-TX, IEEE802.3ab 1000Base-X, IEEE802.3z 1000Base-X, IEEE802.3x
Forwarding Mode	Store and Forward (Full Wire Speed)
Switching Capacity	24Gbps
Buffer Memory	17.85Mpps
MAC	8K
LED Indicator	Power Indicator Light Green Fiber Indicator Light Green On the RJ45 seat Yellow: PoE Green: Network working status
Reset Switch	Yes, Press and hold the reset switch for 5s and release it to restore the factory settings

SOFTWARE FEATURES

Port configuration	Auto-Negotiation Flow Control Port Mirror: TX/RX/BOTH; Many-to-1 monitor. Traffic statistics
Link Aggregation	Static Link Aggregation LACP Algorithm based on Source/Destination MAC Algorithm based on Source/Destination IP
MAC Table	Aging Time Static MAC address Dynamic MAC address management
VLAN	4094 Active VLANs 4094 VID 802.1Q Tag VLAN Port VLAN Protocol VLAN MAC VLAN Voice VLAN 802.1ad Q-in-Q tunnelling Private VLAN (Protected port) GARP/GVRP
ACL	256 ACLs L2, L3, L4 Time-based ACL
Spanning Tree	802.1D Spanning Tree Protocol (STP) 802.1w Rapid Spanning Tree Protocol (RSTP) 802.1s Multiple Spanning Tree Protocol (MSTP) Loop Guard Root Guard TC-BPDU Guard BPDU Guard BPDU Filter
Ring Protection	<20ms G.8032 ERPS Ring
Multicast	256 groups IGMP v1/v2/v3 Snooping, Fast Leave MLD Snooping Multicast VLAN
QOS	Port-based CoS 802.1p-based CoS DSCP-based. Scheduling algorithms SP, WRR, SP+WRR Storm Control (Broadcast, Multicast, Unknown Unicast) Bandwidth control per port

DHCP

SNMP v1/v2c/v3 with Full Private MIBs RMON 4 groups
WEB (HTTP/HTTPS)
CLI (Telnet, Console, SSHv1/v2)
Firmware upgrade via console/web/TFTP Configuration
Backup/Reload
Dual Firmware
LLDP

Security Features

Port Security
MAC Address filter
ARP Association (Manual, ARP scanning, DHCP snooping)
ARP Protection
DoS (Denial of Service)
Classification of packages based on: End.MAC, IP End, TCP / UDP Ports, Protocol Type.
802.1x Authentication (Port-based e MAC-based)
TACACS/TACACS+ Authentication
RADIUS Authentication
DHCP Filter
Guest VLAN
SSLv2/SSLv3/TLSv1
SSHv1/SSHv2
Restriction of WEB access based on: IP Address, And. MAC and Port.
Port Isolation
Loopback Detection

Other Features

DNS Client DHCP
Relay DHCP Client
DHCP Snooping
DHCP Option 82
SNTP Client
UDLD

Maintenance

Cable Diagnostics
Ping
SFP DDM (Digital Diagnostics Monitoring)
Thermal Protection
System log (Local and Remote)
Memory and CPU Monitoring

PoE Management

Soft-Reboot PoE Non-stop
Total PoE Per port PoE function enable/disable
PoE classification detection
PD alive check
PoE schedule

APPROVALS AND STANDARDS TESTED FOR

IEC61000-4-2	ESD: $\pm 8\text{kV}$ contact discharge, $\pm 15\text{kV}$ air discharge
IEC61000-4-3	RS: 10V/m (80~ 1000MHz)
IEC61000-4-4	EFT: power cable: $\pm 4\text{kV}$; data cable: $\pm 2\text{kV}$
IEC61000-4-5	Surge: power cable: $\text{CM}\pm 4\text{kV}/\text{DM}\pm 2\text{kV}$; data cable: $\pm 4\text{kV}$
IEC61000-4-6	Radio frequency transmission: 10V (150kHz~80MHz)
IEC61000-4-8	Power frequency magnetic field: 100A/m ; 1000A/m , 1s to 3s
IEC61000-4-9	Pulsed magnet field: 1000A/m
IEC61000-4- 10	Damped oscillation: 30A/m 1MHz
IEC61000-4- 12/ 18	Shockwave: CM 2.5kV , DM 1kV
IEC61000-4- 16	Common-mode transmission: 30V ; 300V , 1s
IEC61000-6-2	Common Industrial Standard
IEC60068-2-6	Anti vibration
IEC60068-2-27	Anti shock
IEC60068-2-32	Free fall
CCC, CE mark, commercial, CE/LVD EN62368- 1, FCC Part 15 Class B, RoHS	Certifications
Lightning Protection	Lightning protection: 6KV 8/20us, Protection level: IP40

POWER

Power Supply	48V to 57V/5A, 240W Dual Redundant
PoE Power supply	Supports 1,2+, 3,6-power supply
PoE Output Power	IEEE802.3af/at, with a maximum power of 30W per port and a total power of 240W

PHYSICAL CHARACTERISTICS

Dimension (L*W*H)	172mm* 145mm*54mm
Installation	Desktop, DIN rail
Enclosure	Aluminum-Alloy

ENVIRONMENT

Working Temperature	-40°C to +75°C
Storage Temperature	-40°C to +85°C
Operating Humidity	5% to 90% (non-condensation)
Storage Humidity	5% to 90% (non-condensation)

ORDERING CODE

DDPSMG 308-4S CF

DDPSMG	Industrial Grade L2+ PoE Giga Managed Ethernet Switch
308	8 * 10/100/1000M T PoE Ports
4S	4 * 100/1000Base-X uplink SFP slot ports
CF	Fixed

DATA BRIDGE
D Y N A M I C