



28 PORT - INDUSTRIAL GRADE L3 MANAGED SWITCH

DDSMGR SERIES



SYNOPSIS

- HIGH-PERFORMANCE, MODULAR 10G SFP+ LAYER 3 CORE SWITCH DESIGNED FOR DEMANDING CORE NETWORK AND GIGABIT AGGREGATION APPLICATIONS.
- SUPPORTS UP TO 4 PORTS OF 10G SFP+ FOR HIGH-SPEED UPLINK CONNECTIVITY, WITH MODULAR DESIGN ENABLING FUTURE 10G EXPANSION.
- INTEGRATED STATIC AND DYNAMIC LAYER 3 ROUTING FOR ADVANCED NETWORK TOPOLOGIES AND SEAMLESS CORE INTEGRATION.
- UTILIZES A ROBUST, HARDWARE-ACCELERATED SWITCHING ARCHITECTURE FOR STABLE AND SCALABLE PERFORMANCE.
- PROVIDES UP TO 1.2TBPS TOTAL SWITCHING CAPACITY, SUPPORTING PORT FULL-SPEED FILTERING AND LINE-RATE FORWARDING OF UP TO 406 MILLION PACKETS PER SECOND (MPPS).
- DUAL-STACK IPV4/IPV6 HARDWARE SUPPORT FOR COMPATIBILITY WITH NEXT-GENERATION NETWORKS AND LINE-RATE PACKET FORWARDING IN BOTH PROTOCOLS.
- WIDE OPERATING TEMPERATURE RANGE FROM -40°C TO +85°C, SUITABLE FOR HARSH INDUSTRIAL AND CRITICAL INFRASTRUCTURE ENVIRONMENTS.
- 19-INCH RACK-MOUNTABLE FORM FACTOR FOR CONVENIENT INTEGRATION INTO DATA CENTER OR INDUSTRIAL CABINETS.
- INDUSTRIAL-GRADE BUILD AND PLUG-AND-PLAY DEPLOYMENT FOR RAPID INSTALLATION AND RELIABLE OPERATION.
- IDEAL FOR GIGABIT CONVERGENCE, AGGREGATION, AND CORE NETWORK DEPLOYMENTS WITH HIGH TRAFFIC AND RELIABILITY REQUIREMENTS.

SPECIFICATIONS

Interface	16-Port 10/100/1000Mbps RJ45 8-Port 10/100/1000Mbps (combo) 4-Port 10G SFP+ 1-Port console
Performance Specification	Bandwidth (switch capacity) : 1.2Tbps Packet Buffer Memory :32Mbit Packet Forwarding Rate :406Mpps MAC Address Table : 32K
Maximum Frame Size	16360bytes
Flow Control	Back pressure for half duplex, IEEE 802.3x pause frame for full duplex
LED Indicator	Power: Red Fiber: Link 2(Green) Ethernet: Yellow
MTBF	300,000hours

Network Protocols

IEEE802.3 10BASE-T.
IEEE802.3i 10Base-T.
IEEE802.3u;100Base-TX/FX.
IEEE802.3ab 1000Base-T.
IEEE802.3z 1000Base-X.
IEEE802.3x;

Network cables

10BASE-T: Cat3,4,5 UTP (≤ 100 meter)
100BASE-TX: Cat5 or later UTP(≤ 100 meter)
1000BASE-TX: Cat6 or later UTP (≤ 100 meter)

SOFTWARE FEATURES

Interface

IEEE802.3X (Full duplex)
Port temperature protection setting
Port green Ethernet Energy-saving setting
Broadcast storm control based on port speed.
The speed limit of the message flow in the access port.
The minimum particle size is 64Kbps.

Layer 3 Features

L3 Network Management,
IPV4/IPV6 management
L3 soft routing forwarding,
Static route, Default route @ 128 pcs, APR@1024pcs

VLAN

4K VLAN based on port,
IEEE802.1q
VLAN based on the protocol
VLAN based on MAC
VLAN based on IP
Voice VLAN,
QinQ configuration
Port configuration of Access, Trunk, Hybrid

Port Aggregation

LACP, Static Aggregation
Max 14 aggregation groups and 16 ports per group.

Spanning Tree

STP (IEEE802.1d),
RSTP (IEEE802.1w),
MSTP (IEEE802.1s)

**Industrial Ring
Network Protocol**

G.8032 (ERPS),
Recovery time less than 20ms
250 Ring at most, Max 250 devices per ring

Multicast

MLD Snooping v1/v2,
Multicast VLAN Registration (MVR)
IGMP Snooping v1/v2, Max 1024 multicast groups,
Fast log out

**Port Mirroring
QoS**

Bidirectional data mirroring based on port

SP (Strict Priority)
WFQ (Weighted Fair Queuing)
WRR (Weighted Round Robin)
Random Early Detect (RED)
Weighted Random Early Detection (WRED)
Head Of Line
Best-Effort Service
First come first served
802.1p
Cos/Tos, QOS
Differentiated Service

ACL

Port-based Issuing ACL,
ACL based on port and VLAN
L2 to L4 packet filtering, matching first 80bytes message.
Provide ACL based on MAC, Destination MAC address, IP
Source, Destination IP, IP Protocol Type, TCP/UDP Port,
TCP/UDP Port Range, and VLAN, etc.

Security

Support IP ACL, MAC ACL, VLAN ACL
Support ACL based on L3 L4
IP+MAC Port binding
Support IP Source Guard, RP Detection
Support IEEE 802.1x port verification
Support Radius

DHCP

DHCP Client
DHCP Snooping
DHCP Server
DHCP Relay

IP routing

Supports port-based input/output bandwidth management.
Supports static routes IPV6
Supports the Virtual Route Redundancy Protocol VRRP.
Dynamic routes such as RIP, RIPng, OSPF, and OSPFv3 are supported.

System Maintenance

Supports configuration file uploading and downloading.
Upload the upgrade package.
Supports factory restore on WEB
Supports the system log function.
Support Ping, Tracert, cable detection and other diagnostic functions.
Supports WEB Management (HTTP and HTTPS)
Supports CLI Management
Supports Telnet Remote Management.
Supports SSH 2.0.
Supports SNMP Network Management.
Support RMON
Supports NTP clients.

APPROVAL AND STANDARD TESTED FOR

IEC61000-4-2	ESD: ±8kV (contact), ±15kV (air)
IEC61000-4-3	RS: 10V/m 80 MHz-1 GHz: 10 V/m
IEC61000-4-4	EFT: Power Port: ±4kV; Data Port: ±2kV
IEC61000-4-5	Surge protection of power: 6KV/4KV-8/20us Surge protection of Ethernet ports: 6KV/2KV-10/700us
IEC61000-4-6	CS: 3V (10kHz-150kHz); 10V (150kHz-80MHz)
IEC61000-4-16	Common mode conduction: 30V (cont.), 300V (1s)
FCC CFR47 Part 15, EN55032	EMI

POWER

Power Input	Dual Power Input 36 to 72V DC & 110 to 240V/50 to 60Hz AC
Power Consumption	< 30watts
Surge Protection	±4KV

PHYSICAL CHARACTERISTICS

Dimensions (W x D x H)	442×194×44mm
Enclosure	IP50 Aluminum housing
Installation	Bracket mounted
Weight	4KGS

ENVIRONMENTAL

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

ORDERING CODE

DDSMGR 4016-8GC-4S+ Y

DDSMGR	Industrial Grade Rack Type L3 Managed Ethernet Switch
4016	16 * 10/100/1000 Copper Ports
8GC	8 * 10/100/1000 Combo Ports
4S+	4 * 10 G SFP
Y	Fixed