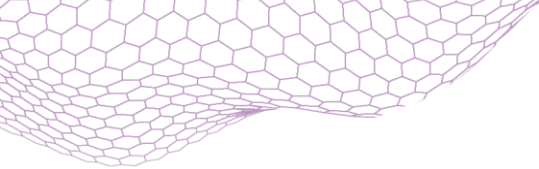




20 PORT – LAYER 3 INDUSTRIAL ETHERNET MANAGED SWITCH-GIGA

DDSMGR SERIES

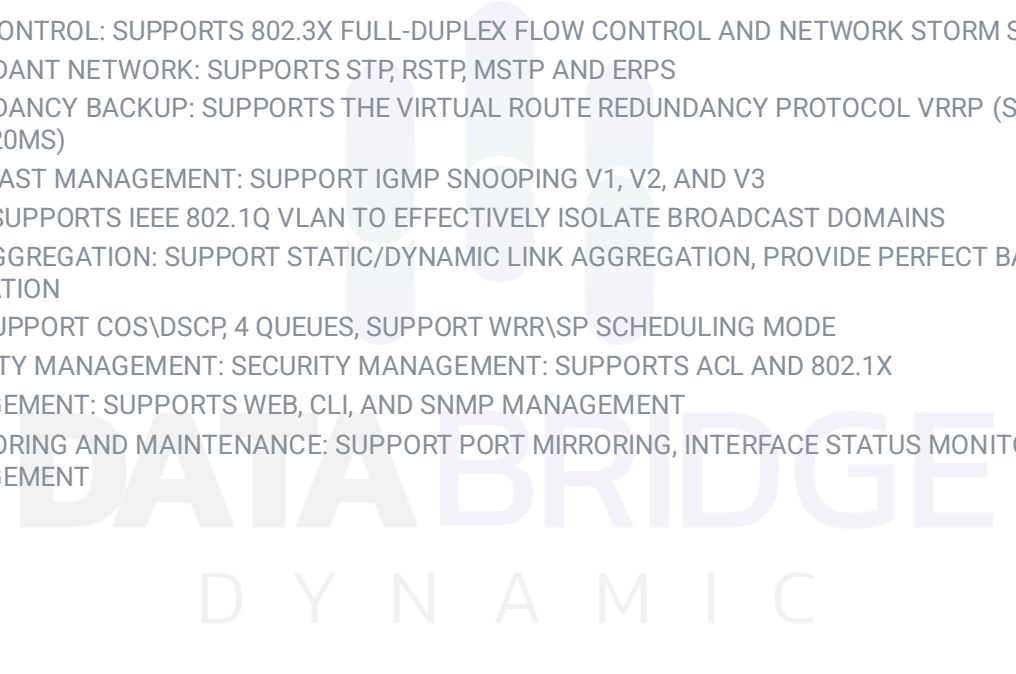




SYNOPSIS

- DDSMG 4016-4S+ Y SWITCH IS A HIGH PERFORMANCE 16 PORT GIGABIT + 10G SFP+ L3 CORE SWITCH.
- IT PROVIDES STATIC ROUTING AND DYNAMIC ROUTING WITH ADVANCED HARDWARE PROCESSING CAPACITY.
- SUPPORTS UP TO 4 PORT 10G SFP+
- IT SUPPORTS IPV4/IPV6 HARDWARE DOUBLE STACK AND LINE SPEED FORWARDING
- OPERATING TEMPERATURE OF -40°C TO 80°C
- DDSMG 4016-4S+ Y SWITCH IS BASED ON THE POWERFUL AND STABLE PROCESSING POWER OF VCORE-III MIPS-BASED CPU

FEATURES

- DATA CONTROL: SUPPORTS 802.3X FULL-DUPLEX FLOW CONTROL AND NETWORK STORM SUPPRESSION
 - REDUNDANT NETWORK: SUPPORTS STP, RSTP, MSTP AND ERPS
 - REDUNDANCY BACKUP: SUPPORTS THE VIRTUAL ROUTE REDUNDANCY PROTOCOL VRRP (SELF-HEALING TIME <20MS)
 - MULTICAST MANAGEMENT: SUPPORT IGMP SNOOPING V1, V2, AND V3
 - VLAN: SUPPORTS IEEE 802.1Q VLAN TO EFFECTIVELY ISOLATE BROADCAST DOMAINS
 - LINK AGGREGATION: SUPPORT STATIC/DYNAMIC LINK AGGREGATION, PROVIDE PERFECT BANDWIDTH UTILIZATION
 - QOS: SUPPORT COS\DSCP, 4 QUEUES, SUPPORT WRR\SP SCHEDULING MODE
 - SECURITY MANAGEMENT: SECURITY MANAGEMENT: SUPPORTS ACL AND 802.1X
 - MANAGEMENT: SUPPORTS WEB, CLI, AND SNMP MANAGEMENT
 - MONITORING AND MAINTENANCE: SUPPORT PORT MIRRORING, INTERFACE STATUS MONITORING, LOG MANAGEMENT
- 

TECHNICAL SPECIFICATIONS

INTERFACE

Networking Interfaces	16-Port 10/100/1000Mbps RJ45 4-Port 10G SFP+ (compatible with 1000M/2500M/10000M) 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	10240bytes	
Flow Control	Back pressure for half duplex, IEEE 802.3x pause frame for full duplex	
LED Indicators	POWER	: Red
	RUN	: Green
	Fiber	: X1 to X4(Green)
	Ethernet	: Yellow
Network Protocols	IEEE 802.3ad, link aggregation protocols IEEE802.3 10BASE-T. IEEE802.3i 10Base-T. IEEE802.3u;100Base-TX/FX. IEEE802.3ab 1000Base-T. IEEE802.3z 1000Base-X. IEEE 802.3ae,10G IEEE 802.3x, Full duplex Ethernet data link Laminar flow control IEEE 802.3az, EEE highly efficient ethernet	
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)
MTBF	300,000hours	

POWER

Power Input	DC 12V to 52V
Power Consumption	< 18watts
Surge protection	CM $\pm$ 4KV, DM $\pm$ 2KV

PHYSICAL

Enclosure	IP40 Aluminum housing
Installation	Din rail
Dimensions (W x D x H)	166 x 137 x68.5mm
Weight	Product Weight: 1.2KGS

ENVIRONMENT

Working temperature	-40 to 80°C
Storage temperature	-40 to 80°C
Relative Humidity	5% to 95 % (no condensation)

MANAGEMENT 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)
Port Mirroring	Bidirectional Data Mirroring based on port

Industrial Ring Network Protocol	G.8032 (ERPS), Recovery time less than 20ms 250 Ring at most Max 250 devices per ring. Multicast
Multicast	MLD Snooping v1/v2 Multicast VLAN Registration (MVR) IGMP Snooping v1/v2 Max 1024 multicast groups, Fast Log Out
QoS	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 IEEE802.1p 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 tracer, 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) $\pm 8\text{kV}$ (contact), $\pm 12\text{kV}$ (air)
IEC61000-4-3	(RS) 10V/m (80 to 1000MHz)
IEC61000-4-4	(EFT) Power Port : $\pm 4\text{kV}$. Data Port : $\pm 2\text{kV}$
IEC61000-4-5	(Surge) Power Port : $\pm 2\text{kV/DM}$, $\pm 4\text{kV/CM}$ Data Port : $\pm 2\text{kV}$
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 Class A	Other

ORDERING CODE

DDSMG 4016-4S+ Y

DDSMG	Industrial Ethernet Layer 3 Giga Managed Switch
4016	16 x 10/100/1000M RJ45
4S+	4 x 10G SFP
Y	Fixed