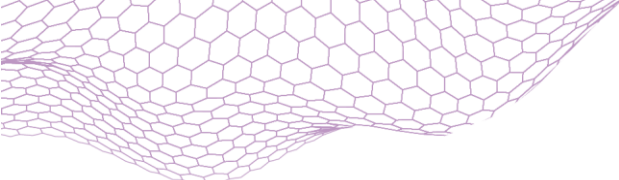




INDUSTRIAL ETHERNET LAYER 3 MANAGED GIGA SWITCH – DIN MOUNT

DDSMG SERIES





SYNOPSIS

- THE DDSMG 4024-4S+ ST SERIES ARE HIGHLY RELIABLE DIN TYPE LAYER 3 MANAGED INDUSTRIAL ETHERNET SWITCHES, EQUIPPED WITH $24 \times 10/100/1000\text{BASE-T}$ RJ45 PORTS AND $4 \times 1\text{G}/2.5\text{G}/10\text{GBASE-X}$ SFP+ PORTS.
- WITH GIGABIT DOWNLINK AND 10G UPLINK CAPABILITY, THESE SWITCHES ENABLE RAPID TRANSMISSION OF LARGE VOLUMES OF VIDEO, VOICE AND DATA TRAFFIC.
- THESE SWITCHES ARE AN EXCELLENT CHOICE FOR APPLICATIONS IN HEAVY INDUSTRIAL MANUFACTURING, TRANSPORTATION, OIL & GAS, CHEMICAL INDUSTRIES, IP SURVEILLANCE, AND PROCESS AUTOMATION, WHERE RELIABILITY UNDER HARSH AND DEMANDING CONDITIONS IS CRITICAL.

FEATURES

- THE SWITCH PROVIDES $24 \times 10/100/1000\text{BASE-T}$ RJ45 ETHERNET PORTS ALONG WITH $4 \times 1\text{G}/2.5\text{G}/10\text{GBASE-X}$ SFP+ PORTS FOR HIGH-SPEED AND FLEXIBLE NETWORK CONNECTIVITY.
- IT SUPPORTS A REDUNDANT DC POWER INPUT RANGE OF 12–75 VDC AND INCLUDES REVERSE POLARITY, OVER-VOLTAGE, AND OVER-CURRENT PROTECTION TO ENSURE SAFE AND RELIABLE OPERATION.
- THE DEVICE SUPPORTS USB ONE-KEY CONFIGURATION AND FIRMWARE UPGRADE, ENABLING QUICK DEPLOYMENT AND SIMPLIFIED MAINTENANCE.
- THE SWITCH SUPPORTS LAYER 3 FEATURES, INCLUDING STATIC ROUTING AND DYNAMIC ROUTING PROTOCOLS, FOR ADVANCED NETWORK SEGMENTATION AND ROUTING CAPABILITY
- THE DEVICE SUPPORTS IPV4 AND IPV6 NETWORK MANAGEMENT AND CAN BE MANAGED VIA WEB INTERFACE, SNMP, CLI, TELNET, AND SSH.
- IT SUPPORTS USER ACCOUNT MANAGEMENT, SYSTEM LOGGING, CONFIGURATION UPLOAD AND DOWNLOAD THROUGH THE WEB INTERFACE, AND FIRMWARE UPGRADES VIA HTTP, TFTP, OR USB.
- THE SWITCH SUPPORTS THE G.8032 ERPS PROTOCOL WITH A RECOVERY TIME OF ≤ 20 MS, ENSURING FAST NETWORK SELF-HEALING AND HIGH AVAILABILITY.
- THE DEVICE FEATURES A FAN-LESS IP40-RATED INDUSTRIAL ENCLOSURE WITH DIN-RAIL MOUNTING.
- IT SUPPORTS A WIDE OPERATING TEMPERATURE RANGE FROM -40°C TO $+80^{\circ}\text{C}$, MAKING IT SUITABLE FOR EXTREME INDUSTRIAL CONDITIONS.

TECHNICAL SPECIFICATIONS

INTERFACE

Ethernet	24*10/100/1000Base-T RJ45 4*1G/2.5G/10GBase-X SFP+
Management port	1*RJ45 Console port 1*USB 2.0 for configuration and firmware update
Standard	IEEE 802.3 10Base-T Ethernet IEEE 802.3u 100Base-TX Ethernet IEEE 802.3ab 1000Base-T Ethernet IEEE 802.3z 1000Base-X Ethernet IEEE 802.3ae 10GBase-X Ethernet IEEE802.3x Flow Control and Back Pressure IEEE 802.1D Spanning Tree Protocol IEEE 802.1w Rapid Spanning Tree Protocol IEEE 802.1Q VLAN ITU-T G.8032 ERPS IEEE 802.1X Port Authentication Network Control IEEE 802.1ab LLDP IEEE 802.3ad LACP
LED indicator	P1/P2 (Power indicator), SYS (System status indicator), USB (USB status indicator), ALM (Fault status indicator), Ring (Ring network indicator), 1-24 (Copper ports indicators), 1-24(Copper speed indicators), 25-28 (Fiber ports indicators)

SOFTWARE FEATURES

L2 FEATURES

Port Aggregation	Support GE port Aggregation Support 2.5GE Aggregation Support 10GE Aggregation Support Static Aggregation Support Dynamic Aggregation
Port Features	Support IEEE802.3x flow control Support port traffic statistics, Support port isolation Support Network storm suppression based on port bandwidth percentage

VLAN	Support Access mode Support Trunk mode Support Hybrid mode
VLAN classification	Mac Based VLAN IP Based VLAN Protocol Based VLAN
QinQ	Port-based QinQ VLAN-based QinQ Flow-based QinQ
Port mirroring	Many to one port mirroring
Ring network protocol	Support STP, RSTP, MSTP Support G.8032 ERPS protocol, single ring, sub-Ring and associated sub ring Recovery time ≤ 20 ms
DHCP	Support DHCP Client Support DHCP Snooping
Multicast	IGMP V1, V2, V3 IGMP snooping
ACL	IP Standard ACL MAC extend ACL IP extend ACL
QoS	Support QoS Class, Remarking Support SP, WRR queue scheduling Ingress Port-based Rate-limit Egress Port-based Rate-limit Support Policy-based QoS
Management & Maintenance	Support LLDP Support user management and login authentication Support SNMPV1/V2C/V3 Support Web management, HTTP1.1, HTTPS Support Syslog and Alarm grading Support RMON (Remote Monitoring) alarm Support NTP Support Temperature Monitoring Support Ping, TRACERT Support Optical transceiver DDM function Support TFTP Client Support Telnet Server Support SSH Server Support IPv6 Management Support TFTP, web upgrading Support USB upgrading Support USB importing configuration

Security

Support Dot1x, Port Authentication,
MAC Authentication, RADIUS service
Support port-security
Support IP Source Guard, IP/Port/MAC binding
Support ARP-check and ARP packet filtering for
illegal users
Support Port isolation

LAYER 3 FUNCTION

ARP	ARP table aging
IPv4 / IPv6	Static routing
ECMP	Support ECMP (Equal-cost multi-path routing) Support the configuration of ECMP Max next hop Support capacity balanced configuration
Route policy	IPv4 prefix-list
VRRP	Virtual Router Redundancy Protocol
Routing Entry	13K
IP routing Protocol	RIPv1/v2 OSPFv2 BGP4. BGP supports Routing recursive ECMP. Support to view the number of neighbors and up/down state IS-ISv4

SWITCHING FEATURES

Switching capacity	128Gbps
Packet forwarding rate	190Mpps
MAC address table	16K
VLAN	4K
Buffer	12Mbit
Forwarding delay	<5us
Jumbo Frame	Support 10Kbytes
MDX/MIDX	Support
Watchdog	Support

APPROVALS & STANDARDS TESTED FOR

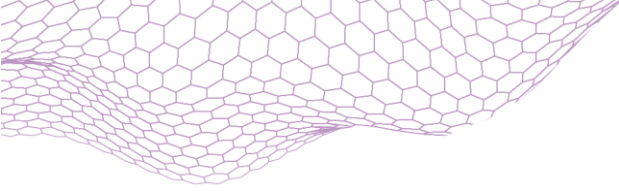
IEC 61000-4-2	ESD: Contact: 8K ; Air: 15K
IEC 61000-4-3	RS : 80 MHz-1 GHz : 10 V/m
IEC 61000-4-4	EFT: power 4K, signal 2K
IEC 61000-4-5	Surge protection of Ethernet ports: 6KV/2KV (10/700us) Surge protection of power DC:6KV/6KV (8/20us)
IEC 61000-4-6	CS : 10V
FCC Part 15B Class A	EMI
IEC 60068-2-27	Shock
IEC 60068-2-32	Free fall
IEC 60068-2-6	Vibration

POWER

Input Voltage	12-75VDC, Redundant power input
Input Current	2.5A DC/DC input Max
Power Consumption	Full loading ≤30W
Connector	Removable 2-pin Terminal block
Reverse polarity protection	Support
Over-voltage protection	Support
Over-current protection	Support

PHYSICAL CHARACTERISTICS

Dimension (W*D*H)	90*115*158mm
Enclosure	IP40
Installation	DIN-rail



ENVIRONMENT

Working Temperature	-40°C to +80°C
Storage Temperature	-40°C to +85°C
Relative Humidity	10 - 90% RH
Storage humidity	5% - 95%RH

ORDERING CODE

DDSMG 4024-4S+ ST

DDSMG	Industrial Grade DIN mount Giga L3 Managed Ethernet Switch
4024	24 * 10/100/1000M Copper Port
4S+	4 * 1G/2.5G/10GBase-X SFP+
ST	Fixed

DATA BRIDGE
D Y N A M I C