

# Industrial Gigabit Managed PoE Switch

## DMP2642GCF



### Description

DMP2642GCF Industrial Ethernet switch with management function is designed to meet rigorous mission critical applications, such as factory automation, intelligent transportation system (ITS), process control and also suitable for many military and utility market applications where environmental conditions exceed commercial product specifications. DMP2642GCF Gigabit Managed Switches provides a reliable infrastructure for your industrial automation applications. DMP2642GCF supports 802.3af/at Power over Ethernet (PoE), with a range of PoE power budgets from 300W to 450W.

DMP2642GCF support the Ethernet Ring Protection protocol, healing time can be less than 20ms, VLAN, QinQ, STP/RSTP, support QOS, ACL multicast, rich two layer exchange function, while providing CLI, Telnet, SSH, Http, Https and other management and network management software based on SNMPv1/v2c/v3. The switch can be managed centrally and conveniently by 'Hi-View' Element Management System, the whole network equipment can be managed at central office.

### Features

- ◆ Comply with IEEE 802.3, 802.3u, 802.3/ab 10/100/1000BASE-T and other international standards
- ◆ Support IP4.0
- ◆ Support IEEE802.3af/at PoE standard up to 30W maximum power output
- ◆ Automatic detection and recognition of the receiving equipment in accordance with IEEE802.3af/at standard
- ◆ Support cable fault detection, a key to restart and restore the factory function
- ◆ Comply with CE, FCC and other related standards
- ◆ Support spanning tree (STP), fast spanning tree (RSTP) protocol and multi spanning tree (MSTP) protocol



- ◆ Support VLAN 802.1Q, basic QinQ and flexible QinQ, support up to VLAN 4K table entry
- ◆ Support port aggregation and 1:1 port protection
- ◆ Support IEEE802.3ah, IEEE802.1ag and Y.1731 OAM Management Protocol
- ◆ Support for unified network management and Web Server configuration based on SNMP protocol
- ◆ Support Dying Gasp remote equipment fail alarm
- ◆ Support Ethernet ring network protocol ERPS, support ring protection protocol, protection switching time is less than 20ms
- ◆ Based on port aggregation, linear protection based on G.8031 protocol and the protection of the ring network based on G.8032 protocol;
- ◆ Support port loopback detection and device online upgrade

## Specification

### Standard

IEEE 802.3	10Base-T 10Mbit/s Ethernet
IEEE 802.3u	100Base-TX, 100Base-FX, Fast Ethernet
IEEE 802.3ab	1000Base-T Gigabit/s Ethernet over twisted pair
IEEE 802.3z	1000Base-X Gigabit/s Ethernet over Fiber-Optic
IEEE 802.1d	STP (Spanning Tree Protocol)
IEEE 802.1w	RSTP (Rapid Spanning Tree Protocol )
IEEE 802.1s	MSTP (Multiple Spanning Tree Protocol)
ITU-T G.8032 /Y.1344	ERPS (Ethernet Ring Protection Switching)
IEEE 802.1Q	Virtual LANs (VLAN)
IEEE 802.1X	Port based and MAC based Network Access Control, Authentication
IEEE 802.3ad	Link aggregation for parallel links with LACP(Link Aggregation Control Protocol)
IEEE 802.3x	Flow control for Full Duplex
IEEE 802.1ad	Stacked VLANs, Q-in-Q
IEEE 802.1p	LAN Layer 2 QoS/CoS Protocol for Traffic Prioritization
IEEE 802.1ab	Link Layer Discovery Protocol (LLDP)
IEEE 802.3af	PoE (Power over Ethernet)
IEEE 802.3at	PoE+ (Power over Ethernet enhancements)

### Protocols

IGMPv1/v2/v3, GMRP, GVRP, SNMPv1/v2c/v3, DHCP Server/Client, , TFTP, SNTP, SMTP, RARP, RMON, HTTP, HTTPS, Telnet, Syslog, DHCP Option 66/67/82, SSH, LLDP, IPv6, NTP

### Switch Properties



Priority Queues:	8
VLAN ID Range:	VID 1 to 4094
IGMP Groups:	2048
MAC Table Size:	8 K
Packet Buffer Size:	4 Mbit
Switching capacity	53G

### Interface

RJ45 Ports:	16~24 10/100/1000M Base T adaptive
Fiber Ports:	2~6 100/1000M Base SFP
Console Port:	RS-232 (RJ-45)
Alarm Contact:	Normal Close, Normal Open
Button	Reset button

### PoE

Standard	IEEE 802.3at/ 802.3af
Ping Assignment	PoE supports (Pin1, 2 for Positive (V+), Pin3, 6 for Negative(V-))

### Certification

EMC	CE
EMI (Electromagnetic Interference)	FCC Part 15 Subpart B Class A, CE
EMS (Electromagnetic Susceptibility) Protection Level	EN61000-3-2 EN61000-3-3 EN61000-4-2 (ESD) Contact: 6 kV; Air: 8 kV EN61000-4-3 (RS) 80 MHz to 1 GHz: 10 V/m EN61000-4-4 (Burst) Power: 2 kV; Signal: 1 kV EN61000-4-5 (Surge) Power: 2 kV; Signal: 1 kV EN61000-4-6 (CS) 10 V EN61000-4-8 (PFMF, Magnetic Field) Field Strength EN55032 EN55024 CISPR 32 EN60950-1
FCC	PART15B

### Operation

Temperature	-40 to 75°C
Humidity	5 to 95% non-condensing

### Power

DC	48 V
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## Dimension

Size(W x H x D) 440 x 44 x 300mm

## Software features

VLAN VLAN IEEE 802.1q VLAN, up to 4094 802.1Q VLAN VID  
IEEE 802.1q VLAN, up to 4094 Groups  
IEEE 802.1ad Q-in-Q  
MAC-based VLAN, up to 256 entries  
IP Subnet-based VLAN, up to 128 entries  
Protocol-based VLAN (Ethernet, SNAP, LLC), up to 128 entries  
VLAN Translation, up to 256 entries  
GVRP (GARP VLAN Registration Protocol )  
MVR ( Multicast VLAN Registration)

Link Aggregation Static (Hash with SA, DA, IP, TCP/UDP port), up to 14 trunk group  
Dynamic (IEEE 802.3ad LACP), up to 14 trunk group  
Per group up-to 8 port

Spanning Tree IEEE802.1d STP, IEEE802.1w RSTP, IEEE802.1s MSTP

Loop Protection Supported

ITU-T G.8032 / Y.1344 Recovery time <20ms

ERPS

## QoS

Class of Service IEEE 802.1p 8 active priorities queues for per port

Traffic Classification QoS IEEE 802.1p based CoS  
IP Precedence based CoS  
IP DSCP based CoS  
QCL(QoS Control List): Frame Type, Source/  
Destination MAC, VLAN ID, PCP, DEI  
QCE(QoS Control Entry): Protocol, Source IP, IP Fragment, DSCP,  
TCP/UDP port number

Bandwidth Control for Ingress Per port based

Bandwidth Control for Egress Per port based Per queue / Per port shaper

DiffServ Remarking

Storm Control Unicast, Broadcast, Multicast

## IP Multicasting

IGMP / MLD Snooping IGMP Snooping v1, v2, v3 / MLD Snooping v1, v2 Port Filtering Profile  
Throttling, Fast Leave Maximum Multicast Group : up to 1022 entries  
Query / Static Router Port



## Security

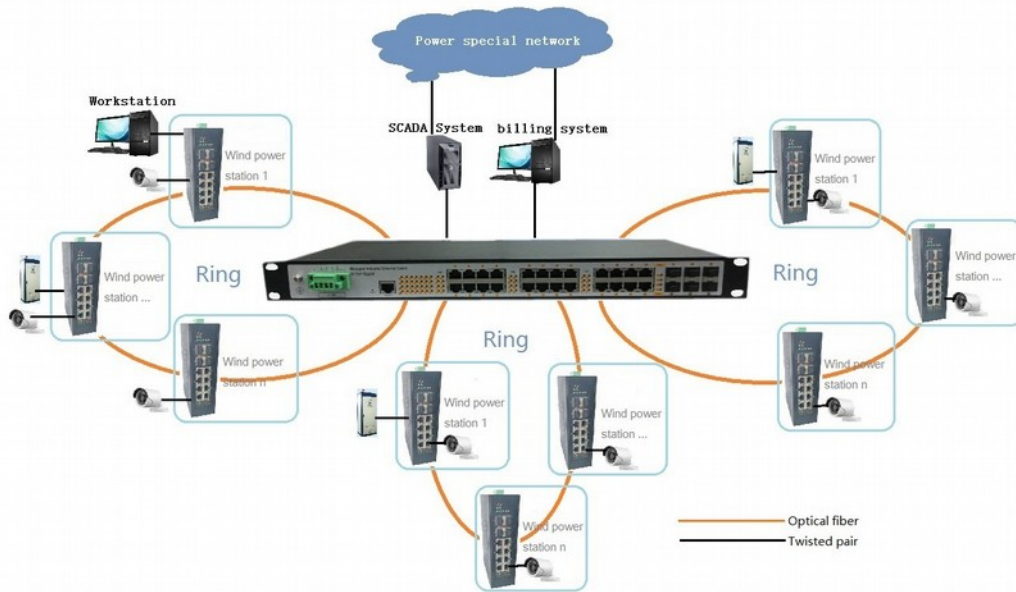
IEEE 802.1X	Port-Based, MAC-Based
ACL	up to 256 entries for L2 / L3 / L4 L2 : Mac address SA/DA/VLAN L3: IP address SA/DA, Subnet L4: TCP/UDP
RADIUS	Authentication & Accounting
TACACS+	Authentication & Accounting
SSH	Supported

## Management

CLI	
CLI	Cisco® like CLI
Web Based Management	
Telnet	Server
SNMP	V1, V2c, V3
SW & Configuration	HTTP
Upgrade	
RMON	RMON I (1, 2, 3, 9 group), RMON II
MIB	RFC1213 MIB II, Private MIB
DHCP	Server, Client, Relay, Snooping, Relay
IP Source Guard	Supported
Port Mirroring	Supported

## Application



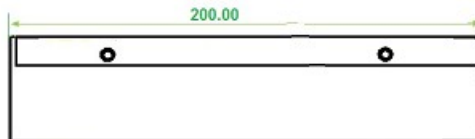


## Dimension

Front View



Side View



## Ordering information

Model	L2 mgt	PoE	# port	UTP	Combo	SFP	Op. Temperature
DMP2642GCF	●	●	26	24	4	6	-40~75°C
DMP2624GCF	●	●	26	24	2	4	-40~75°C
DMP2602GCF	●	●	26	24	0	2	-40~75°C
DMP2206GF	●	●	22	16	0	6	-40~75°C



DMP2004GF	●	●	20	16	0	4	-40~75℃
DMP1802GF	●	●	18	16	0	2	-40~75℃