

DVS-G512W01-4GF Series

IEEE 802.3 af/at PoE+ Managed Industrial 8-Port GbE (PSE) + 4-Port 100/1000Base-SFP Ethernet Switches



-40~70°C



EMC LEVEL 3



FANLESS



- ▶ Based on IEEE 802.3at standard up to 30Watts per port.
Backwardcompatible with IEEE 802.3af
- ▶ Advanced PoE management and intelligent powered device (PD) class detection
- ▶ IPv6 address suitable for larger network and neighbor discovery
- ▶ Automatic IP assignment by DHCP server for easy network construction
- ▶ DHCP relay option 82 for sending DHCP requests with clients' identities to a DHCP server
- ▶ SNMP v1/v2c/v3 facilitates real-time remote management of network devices
- ▶ Proprietary redundancy RING and redundancy CHAIN high end redundancy technologies, for multiple ring topology. Self-healing recovery time < 30ms
- ▶ IEC 62439-2 MRP (media redundancy protocol) for IEC-based redundant ring topology
- ▶ STP/RSTP/MSTP for network redundancy further ensures reliability
- ▶ QoS (IEEE 802.1p) and TOS/DSCP for mission-critical applications
- ▶ IEEE 802.1Q VLAN, Q-in-Q double VLAN, VLAN isolation and GVRP optimize network strategy
- ▶ Enhanced network security with IEEE 802.1X, TACACS+, SSH, HTTPS and SNMP v3
- ▶ IEEE 802.3ad port trunking in parallel to increase the link bandwidth
- ▶ IEEE 1588v2 PTP (Precision Time Protocol) for precise time synchronization of network
- ▶ Broadcast/multicast/unknown unicast Unicast storm control improves throughput problems
- ▶ Loopback-detection to avoid broadcast loops, and shutdown the corresponding ports automatically
- ▶ Cable diagnostic provides the mechanism to detect and report potential cabling issues
- ▶ Intelligent Access Control List (ACL)
- ▶ MAC addresses filtering function per port blocks unauthorized access
- ▶ IGMP snooping prunes multicast traffic
- ▶ Port mirroring for Many-to-One ports online troubleshooting
- ▶ DDM snooping function by SFP fiber module
- ▶ Auto warning by email, relay, Syslog & SNMP trap
- ▶ Compatible with various industrial protocols, including EtherNet/IP, Profinet, CC-LINK IE and DNP 3.0

Specifications

TECHNOLOGY

Standard Compliance

- IEEE 802.3 10Base-T
- IEEE 802.3u 100Base-T(X) and 100Base-FX
- IEEE 802.3ab 1000Base-T
- IEEE 802.3z 1000Base-X
- IEEE 802.3x Flow Control

- IEEE 802.1D Spanning Tree Protocol
- IEEE 802.1w Rapid Spanning Tree Protocol
- IEEE 802.1s Multiple Spanning Tree Protocol
- IEEE 802.1p Class of Service, Priority Protocols
- IEEE 802.1Q VLAN Tagging

TECHNOLOGY

Standard Compliance

- IEEE 802.1X Port Authentication
- IEEE 802.3ad LACP Aggregation
- IEEE 802.1AB Link Layer Discovery Protocol
- IEEE 1588v2 Clock Synchronization
- IEEE 802.3af PoE 15.4 Watts
- IEEE 802.3at PoE 30 Watts

Processing Type

- Store and Forward
- IEEE 802.3x Flow control in full duplex, back-pressure flow control in half duplex

INTERFACE

Gigabit Ethernet

RJ45 Ports:

- 8 10/100/1000Base-T, auto MDI/MDI-X, auto negotiation

SFP Ports:

- 4 100/1000Base-SFP

PoE+ Pinout:

- 1 & 2 DC +, 3 & 6 DC -

Console Port:

- RS-232 in RJ45 connector

LEDs

Device:

- STATUS, PWR1, PWR2, R.M, RING, ALARM

Ports:

- 100/1000M (SFP port), 10/100/1000M (RJ45 port), PoE+

Alarm Contacts(DO)

- 1 relay output
- Carry current 1 A@24V_{DC}

Reset Button

- 1 set

PERFORMANCE AND SCALABILITY

Switching Capacity

- 24Gbps, Wired speed, Non-blocking switching fabric

Forwarding Rate

- 35.7Mpps

MAC Address Table

- 8K

Packet Buffer Memory

- 4M bits

IGMP Multicast Groups

- 256

Max. VLANs

- 4096

Quality of Service

- 8 priority queues per port

DHCP Server

- 253 IP addresses

Jumbo Frame

- 9,216 Bytes

MANAGEMENT

Software

- STP/RSTP/MSTP, LACP, QoS, IGMP Snooping v1/v2/v3, IGMP Query v1/v2, VLAN, SSH, DNS, HTTP, HTTPS, RADIUS, TACACS+, SNMP v1/v2c/v3, SNMP Traps, TFTP, RMON, LLDP, DHCP Server/Client, DHCP Relay Option 82, Telnet, Syslog, SMTP, SMTP Client, DOS/DDOS auto prevention, MRP, MODBUS TCP

Security

- MAC/IP/TCP/UDP filtering, HTTPS, SSH, 802.1x, TACACS+, SNMP v3

Configuration

- Web Browser, Cisco-like Telnet CLI , RJ45 console, SNMP

MIB

- MIB II, Bridge MIB, SNMP MIB, Ether-like MIB, Q-Bridge/P-Bridge MIB, IF
- MIB, Traceroute MIB, TCP MIB, UDP MIB, IP MIB, RMON Group 1,2,3,9, Delta Private MIB

POWER REQUIREMENTS

Input Voltage

- 2 sets, 48 to 57 V_{DC} redundant terminal block input

Input Current

- Max. 5.5A (with powered device); Max. 0.26A (without powered device)

Overload Current Protection

- Present, max. input current 10A

Reverse Polarity Protection

- NOT Present

PHYSICAL

Housing

- IP30 metal case

Dimensions

- 154 mm (H) x 96.4 mm (W) x 105.5 mm (D)

Weight

- 1205g

Installation

- DIN-Rail and wall mounting

ENVIRONMENTAL LIMITS

Operating Temperature

- -40°C to 70°C (-40°F to 158°F)

Storage Temperature

- -40°C to 85°C (-40°F to 185°F)

Ambient Relative Humidity

- 5% to 95% (non-condensing)

APPROVALS

Safety

- EN 60950-1

EMI

- FCC 47 CFR Part 15 Subpart B Class A, EN 55022 (CISPR 22)

EMS(EN55024)

- IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5, IEC 61000-4-6, IEC 61000-4-8, IEC 61000-4-11

Environmental Type Tests

Shock:

- IEC 60068-2-27

Freefall:

- IEC 60068-2-32

Vibration:

- IEC 60068-2-6

Hi-Pot:

- 1.5KV

Ordering Information

Product		Port Combination		Interface		
Model Name	Operating Temperature	af/at PoE+, 10/100/1000 Base-T	100/1000 Base-SFP	DI	DO (Relay)	Power Input
DVS-G512W01-4GF	-40°C to 70°C	8	4	---	1	2

Optional Products

LCP Series: 100Base-FX/1000Base-X SFP Fiber Transceiver

CliQII/PMC Series: 48 V_{DC} Industrial Power Supply