DVS-G406W01-2GF Series

IEEE 802.3af/at PoE Unmanaged Industrial 4-Port GbE + 2-Port 100/1000Base-SFP Ethernet Switches

-40~70°C EMC LEVEL 3 FANLESS

- **4 10/100/1000Base-T PoE(PSE) ports**
- **Based on IEEE 802.3at standard up to 30Watts per port. Backward compatible with IEEE 802.3af**
- **SFP ports support 100Base-FX and 1000Base-X dual transmission speed**
- **Jumbo frame size up to 9K Bytes**
- **48 to 57V_{DC} redundant terminal block power input**
- **Auto warning by relay output for power failure**
- **Compatible with various industrial protocols of EtherNet/IP, Profinet, EtherCAT, 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 802.3af 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:
- 10/100/1000Base-T, auto MDI/MDI-X, auto negotiation

SFP Ports:
- 100/1000Base-SFP

LEDs
Per Device:
- PWR1, PWR2, ALARM

Per Port:
- PoE, 10/100/1000M, LINK/ACT

DIP Switches
- Power failure alarm
- SFP speed

Alarm Contacts (DO)
- 1 relay output
- Carry current 1A@24V_{DC}

PERFORMANCE AND SCALABILITY

Switching Capacity
- 12Gbps, wire-speed, non-blocking switching fabric

Forwarding Rate
- 8.9Mpps

MAC Address Table
- 1K

Packet Buffer Memory
- 1M bits

Jumbo Frame
- 9,216 Bytes

POWER REQUIREMENTS

Input Voltage
• 2 sets, 48 to 57 V_{DC} redundant terminal block input

Input Current
• 5A max. (with power device)

Overload Current Protection
• Present, max. input current 10A

Reverse Polarity Protection
• NOT Present

PHYSICAL

Housing
• IP30 metal case

Dimensions
• 144.3 mm (H) x 26.1 mm (W) x 94.9 mm (D)

Weight
• 410g

Installation
• Industrial DIN-Rail and wall mounting

ENVIRONMENTAL LIMITS

Operating Temperature
• -40℃ to 70℃ (14˚F to 158˚F)

Storage Temperature
• -40℃ to 85℃ (14 ˚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 (CISPR22)

EMS
• IEC 61000-4-2 level 3, IEC 61000-4-3 level 3, IEC 61000-4-5 level 3, IEC 61000-4-6 level 3

Ordering Information

Product		Port Combination		Interface		
Model Name	Operating Temperature	af/at PoE, 10/100/1000Base-T	100/ 1000Base-SFP	DI	DO (Relay)	Power Input
DVS-G406W01-2GF	-40℃ to 70℃	4	2	---	1	2

Optional Products

LCP Series: 100Base-FX/1000Base-X SFP Fiber Transceiver
CliQII/PMC Series: 48 V_{DC} Industrial Power Supplies

LCP-GbE Series

1-Port Gigabit Ethernet SFP Fiber Transceiver

- Compliant with IEEE 802.3z
- Full duplex operation
- Supports IEEE 802.3x flow control
- DDM diagnosis function enhances transmission quality
- Duplex LC connector interface
- Hot-Pluggable for maximum flexibility
- TTL signal detection indicator
- Class 1 laser product (Compliant with IEC 60825-1 and IEC 60825-2)
- Metal case for better EMI immunity
- Wide operating temperature

Specifications

TECHNOLOGY

Standard Compliance

- IEEE 802.3z 1000Base-X

INTERFACE

Gigabit Ethernet

- Port number: 1
- Connectors: Duplex LC

Digital Diagnostics Monitoring Function (DDM)

Basic Information

- Ethernet Compliance Code, Vendor Name, Wavelength, Distance

Enhanced Parameters

- Temperature, Supply Voltage, Transmitted Bias Current, Transmitted Power, Received Power

Note1: All Enhanced Parameters listed above include alarm and warning thresholds
Note2: DDM function is fully compatible with Delta DVS series Industrial Ethernet Switches

Fiber Optics

	1000Base-X		
	LCP-1250A4FDR	LCP-1250B4QDR	LCP-1250B4MDR
Cable	50/125μm MultiMode	9/125μm SingleMode	9/125μm SingleMode
Wavelength	850nm	1310nm	1310nm
Max. TX Power	-4dBm	-3dBm	1dBm
Min. TX Power	-9.5dBm	-9.5dBm	-4dBm
RX Sensitivity	-17dBm	-20dBm	-23dBm
Optical Budget	7.5dBm	10.5dBm	19dBm

PHYSICAL

Housing
• Metal case

Dimensions
• 8.5 mm (H) x 13.4 mm (W) x 57 mm (D)

Installation
• Hot-swappable, pluggable

ENVIRONMENTAL LIMITS

Operating Temperature
Standard Models:
• -5℃ to 70℃ (23˚F to 158˚F)
Wide Temp. Models:
• -40℃ to 85℃ (-40˚F to 185˚F)

Storage Temperature
• -40℃ to 85℃ (-40˚F to 185˚F)

Ambient Relative Humidity
• 5% to 95% (non-condensing)

APPROVALS

Safety
• UL 60950-1, EN 60950-1

Laser Eye Safety
• IEC 60825-1, EN 60825

EMI
• FCC 47 CFR Part 15 Subpart B Class B, EN 55022, CISPR 22

ESD
• IEC 61000-4-2, MIL-STD-883E, EIA-JESD22-A115-A

Ordering Information

Product		Interface		
Standard Temperature -5℃ to 70℃	Wide Temperature -40℃ to 85℃	Connectors	Fiber Type	Max. Link Distance
LCP-1250A4FDRJ	LCP-1250A4FDRTJ	Duplex LC	MultiMode	550m
LCP-1250B4QDRJ	LCP-1250B4QDRTJ	Duplex LC	SingleMode	10km
LCP-1250B4MDRJ	LCP-1250B4MDRTJ	Duplex LC	SingleMode	40km

Note: The actual link distance of a particular fiber optic link depends on the optical budget, the number of connectors and splices, and cabling quantity. Please measure and verify the actual link loss values once the link is established to identify any potential performance issues.

LCP-1FE Series

1-Port Fast Ethernet SFP Fiber Transceiver

- Compliant with IEEE 802.3u
- Full duplex operation
- Supports IEEE 802.3x flow control
- DDM diagnosis function enhances transmission quality
- Duplex LC connector interface
- Hot-Pluggable for maximum flexibility
- TTL signal detection indicator
- Class 1 laser product (Compliant with IEC 60825-1 and IEC 60825-2)
- Metal case for better EMI immunity
- Wide operating temperature

Specifications

TECHNOLOGY

Standard Compliance

- IEEE 802.3u 100Base-FX

INTERFACE

Fast Ethernet

- Port number: 1
- Connectors: Duplex LC

Digital Diagnostics Monitoring Function (DDM)

Basic Information

- Ethernet Compliance Code, Vendor Name, Wavelength, Distance

Enhanced Parameters

- Temperature, Supply Voltage, Transmitted Bias Current, Transmitted Power, Received Power

Note1: All Enhanced Parameters listed above include alarm and warning thresholds
Note2: DDM function is fully compatible with Delta DVS series Industrial Ethernet Switches

Fiber Optics

	100Base-FX		
	LCP-155A4HDR	LCP-155B4JDR	LCP-155B4MDR
Cable	62.5/125μm MultiMode	9/125μm SingleMode	9/125μm SingleMode
Wavelength	1310nm	1310nm	1310nm
Max. TX Power	-14dBm	-8dBm	0dBm
Min. TX Power	-20dBm	-15dBm	-5dBm
RX Sensitivity	-31dBm	-31dBm	-34dBm
Optical Budget	11dBm	16dBm	29dBm

PHYSICAL

Housing
• Metal case

Dimensions
• 8.5 mm (H) x 13.4 mm (W) x 57 mm (D)

Installation
• Hot-swappable, pluggable

ENVIRONMENTAL LIMITS

Operating Temperature
Standard Models:
• -5℃ to 70℃ (23˚F to 158˚F)
Wide Temp. Models:
• -40℃ to 85℃ (-40˚F to 185˚F)

Storage Temperature
• -40℃ to 85℃ (-40˚F to 185˚F)

Ambient Relative Humidity
• 5% to 95% (non-condensing)

APPROVALS

Safety
• UL 60950-1, EN 60950-1

Laser Eye Safety
• IEC 60825-1, EN 60825

EMI
• FCC 47 CFR Part 15 Subpart B Class B, EN 55022, CISPR 22

ESD
• IEC 61000-4-2, MIL-STD-883E, EIA-JESD22-A115-A

Ordering Information

Product		Interface		
Standard Temperature -5℃ to 70℃	Wide Temperature -40℃ to 85℃	Connectors	Fiber Type	Max. Link Distance
LCP-155A4HDRJ	LCP-155A4HDRTJ	Duplex LC	MultiMode	5km
LCP-155B4JDRJ	LCP-155B4JDRTJ	Duplex LC	SingleMode	30km
LCP-155B4MDRJ	LCP-155B4MDRTJ	Duplex LC	SingleMode	60km

Note: The actual link distance of a particular fiber optic link depends on the optical budget, the number of connectors and splices, and cabling quantity. Please measure and verify the actual link loss values once the link is established to identify any potential performance issues.