



DGS-F1000 Series Industrial PoE Unmanaged Gigabit Ethernet Switch

Features

Connectivity

- DGS-F1000 series support maximum 5 x 10/100/1000 Base-T(X) RJ45 ports, 1 x 100/1000 Base-F(x) SFP port and 1 x 1000 Base-X SFP port*
- Up to 4 802.3af or 802.3at compliant PoE ports
- Support 10K Jumbo frames
- Supports 802.3az Energy Efficient Ethernet for power savings
- Works from -40°C~70°C
- Failed power input alarm contact
- Certified by UL 61010-2-201 and UL C1D2/ATEX Zone 2
- EN50155 / EN50121-4 certified for Railway and Trainside applications.

* 1000 Based-X SFP is only supported in 7307

The DGS-F1000 series are 5-7 Port PoE Unmanaged Gigabit Ethernet Switches designed to work in mission critical environments such as mining and heavy industry. DGS-F1000 Series support maximum 5 x 10/100/1000 Base-T(X) RJ45 ports, 1 x 100/1000 Base-F(x) SFP port and 1 x 1000 Base-X SFP port*. With its high performance and non-blocking switching capacity, the DGS-F1000 Series is able to fulfill the increasing demand in industrial networking. Its PoE capability of 30W per port up to four ports simplifies the wiring in complex fields, where every cable is an added cost. The equipped terminal block provide dual redundant power inputs with Reverse Polarity Protection and relay output which allows field engineers to build up a fault alarm system. Its IP30 housing protection, wide operating temperature of -40 to 70°C and DIN-Rail mounting capacities are liable to do most industrial filed applications. The DGS-F1000 Series is fully EN50155-certified to ensure reliable performance under a wide range of power supply conditions, and it complies with essential sections of EN50121-4 for ground equipment.

* 1000 Based-X SFP is only supported in DGS-F1000-5T2S and DGS-F1000-4P1T2S

Technical Specifications						
Model Name	DGS-F1000-5T	DGS-F1000-4P1T	DGS-F1000-5T1S	DGS-F1000-4P1T1S	DGS-F1000-5T2S	DGS-F1000-4P1T2S
Switch Properties						
Processing Scheme	Store-and-Forward					
MAC Address Table	8096					
Jumbo Frame	10K Bytes					
Packet Buffer	1 Mbits					
Ethernet						
Compliance	IEEE802.3 for 10BASE-T IEEE802.3u for 100BASE-T(X) and 100BASE-FX IEEE 802.3ab for 1000BASE-T IEEE 802.3z for 1000BASE-X IEEE 802.1Q for VLAN Tagging IEEE 802.1p for Class of Service IEEE 802.3x Flow Control IEEE 802.3af / 802.3at for Power-over-Ethernet IEEE 802.3az for Energy Efficient Ethernet					
Flow Control	Back pressure and pause frame-based flow control schemes					
LLDP	Forwarding					
Transmission Rate for RJ45	5 x 10/100/1000 Mbps					
Transmission Rate for SFP	DGS-F1000-5T1S, DGS-F1000-4P1T1S 1 x 100/1000 Mbps; DGS-F1000-5T2S, DGS-F1000-4P1T2S SFP1: 1000Mbps / SFP2: 100/1000 Mbps					
Auto MDI/MDI-X	Yes					
Power						
Input Voltage	12-52 VDC*					
Input Current (System)	0.5A @ 12 V			0.6A @ 12V		
Max. Power Consumption (System)	6 W			7.2 W		
Input Current (with PoE)	-	2.6A @ 51 V	-	2.6A @ 51 V	-	2.6A @ 51 V
Max. Power Consumption (with PoE)	-	130 W	-	130 W	-	130 W
Relay Output	24 V / 0.5A					
Connector	Terminal Block					
LED						
Indicators	PWR1, PWR2, Alarm, RJ45 Act/Link, SFP Link, PoE					
Physical Characteristics						
Housing	IP30 protection according to EN 60529					
Material	SECC			Aluminum		
Dimension (W x H x D)	32 x 90 x 110 mm			45.3 x 89.6 x 110 mm		
Weight	420g			350g		
Installation	DIN-rail or wall-mount (optional)					

Environmental Limits	
Operating Temperature	-40°C~70°C (-40°F~158°F)
Storage Temperature	-40°C~85°C (-40°F~185°F)
Ambient Relative Humidity	5%~95%, 55°C (Non-condensing)
*802.3af PoE output starts from 43 VDC input and 802.3at output starts from 51 VDC input.	

Regulatory Approvals				
Safety	UL 61010-1, IEC 61010-1, IEC 61010-2-201, UL C1D2/ATEX Zone 2			
EMC	EN 55032 EN 61000-6-4 EN 55024	EN 61000-6-2 FCC Part15 Subpart B (Class A)		
Rail Traffic	EN50155 / EN50121-1/ EN50121-3-2/ EN50121-4			
Test	Item		Value	Level
IEC 61000-4-2	ESD	Contact Discharge	±8KV	4
		Air Discharge	±15KV	4
IEC 61000-4-3	RS	80-1000MHz	10(V/m)	3
		1.4-2.0GHz	3 (V/m)	
		2.0-2.7GHz	1(V/m)	
IEC 61000-4-4	EFT	AC Power Port	±2.0KV	3
		DC Power Port	±2.0KV	3
		Signal Port	±2.0KV	4
IEC 61000-4-5	Surge	AC Power Port	Line-to Line±1.0KV	3
		AC Power Port	Line-to Earth±2.0KV	3
		DC Power Port	Line-to Line±1.0KV	3
		DC Power Port	Line-to Earth±2.0KV	3
		Signal Port	Line-to Earth±2.0KV	3
IEC 61000-4-6	CS	Conducted	10 Vrms	3
IEC 61000-4-8	PFMF	Enclosure	30 A/m	4
IEC 61000-4-11	DIP	AC Power Port	-	
Shock	MIL-STD-810F Method 516.5v			
Drop	MIL-STD-810F Method 516.5			
Vibration	MIL-STD-810F Method 514.5 C-1 & C-2			
High Altitude	Certified for 4000m altitude according to IEC 60068-2-13			
RoHS	Yes			

Ordering Information	
DGS-F1000-5T	5*10/100/1GTX RJ45
DGS-F1000-4P1T	5*10/100/1GTX RJ45 with 4 PoE
DGS-F1000-5T1S	5*1GTX RJ45 ;1*100/1GFX SFP
DGS-F1000-4P1T1S	5*1GTX RJ45/4PoE;1*100/1GFX SFP
DGS-F1000-5T2S	5*1GTX RJ45;2*100/1GFX SFP
DGS-F1000-4P1T2S	5*1G RJ45/4PoE;2*100/1GFX SFP