Gatecraft™ Ruggedized Ethernet Switches

Catalog Numbers GCL-F801T, -G801T, -F621TF, -F621TSC

General Description

Gatecraft™ industrial-grade Ethernet switches enable you to expand your industrial networks fast and cost-effectively. The ruggedized design assures high reliability and stability in harsh environments.

They offer a 12-48VDC redundant power input design, with Power Polarity Reverse Protect and a removable terminal block for master and slave power. Switches also provide a relay output for power failure alarm.

The switches are packaged in a IP30 rated metal housing to protect against dusty industrial environments. Immunity protection from elegromagnetic interference and heavy electrical surges is provided to 6000VDC for power line EFT and also for Ethernet ESD. A wide operating temperature range of -40 to +75oC is supported. Both DIN-rail and panel mount options are supported.

Each port has 2 LED's which show the link status transmission speed and collision status.

For installations utilizing fiber optics, noise protection and longer distances can be supported with the GCL-F621T*x* models. Use them as a robust bridge between enterprise fiber-optic backbones and industrial Ethernet-enabled devices, or for long-distance *(up to 2km for multi-mode and 60km for single-mode fiber)* transmission runs.

Standard Features

- Auto MDI/MDI-X function
- Supports auto negotiation and 10/100Mbps half/full duplex mode for each copper port
- Automatic address learning and address aging
- CSMA/CD Protocol
- High performance Store and Forward architecture, broadcast storm control, runt/CRC filtering erroneous packets to optimize the network bandwidth
- Integrated address look-up engine
- Prevents packet loss with back pressure *(half-duplex)* & IEEE 802.3 pause frame flow control *(full-duplex)*

GCL-F801T

GCL-G801T

GCL-F521TF

GCL-F621TSC

GCL-F621TS15

Specifications	GCL-F801T	GCL-G801T	GCL-F621TF	GCL-F621TSC, -F621TS15
Communications				
Standards Compliance	IEEE 802.3, 802.3u, 802.3x (802.3ab for Gigabit Switches)			
LAN	10/100Base-TX	10/100/1000Base-T	10/100Base-TX, 100Base-FX	
Max Transmission Distance	100m		100m (Ethernet) 2km (Multi-Mode Fiber) 60km (Single-Mode)	100m (Ethernet) SC: 2km *(Multi-Mode)* S15: 15km *(Single-Mode)*
Transmission Speed	Up to 100 Mbps	Up to 1000Mbps	Up to 100 Mbps	
Switch Specification				
Processing Scheme	Store-and-Forward			
Address Table/Buffer	2K entries	8K entries/176kb	2K entries / 1Mbit	
Fabric/Throughput	1.6Gbps/1.19Mpps		1.2Gbps/0.89Mpps@64Bytes	
Flow Control	Back pressure (half-duplex), IEEE 802.3x Pause Frame (full-duplex)			
Interface				
Network Connectors	(8) RJ-45	(8) RJ-45	(4) RJ-45, (2) LC Fiber	(4) RJ-45, (2) SC Fiber
Power/Relay Connectors	12-48 VDC, Redundant power w/ polarity reverse protection feature			
LED Indicators	P1, P2, P-Fail, 10/100TX: Link/Activity, Duplex/Collision			
Power / Protection				
Consumption/Dissipation	11.6W / 39 BTU	13.2W / 45 BTU	16W / 54 BTU	
Input	12 ~ 48VDC			
Relay Out for Power Fault	(1) 3A @30VDC	(1) 1A@24VDC		
Protection	6000VDC ESD (Ethernet) and 6000VDC EFT (Power)			
Mechanical				
Dimensions (W x H x D)	135x 87x 32 mm		135 x 97 x32 mm	
Weight	454g	473g	442g	
Enclosure	IP30, Metal shell with solid mounting kits			
Mounting	DIN rail kit and wall mount ear			
Environmental				
Operating Temperature	-40 ~ 75°C (-40 ~ 167°F) Operating/Storage			
Humidity	5 ~ 90% (non-condensing) Operating/Storage			
Certifications				
Regulation Compliance	FCC Part 15 Cl A, CE	FCC Part 15 Class A, CE, UL		
Shock/Freefall/Vibration	IEC60068-2-27, IEC60068-2-32, IEC60068-2-6			

Ordering Information	
GCL-F801T	8-port 10/100 Mbps Industrial Ethernet Switch
GCL-G801T	8-port 10/100/1000Mbps Industrial Gigabit Ethernet Switch
GCL-F621TF	4-port 10/100 Base-TX + 2-port 100FX SFP Industrial Ethernet Switch
GCL-F621TSC	4 port 10/100 Base-TX + 2-Port 100FX Multi-Mode Switch, SC Connectors
GCL-F621TS15	4 port 10/100 Base-TX + 2-Port 100FX Single Mode (15km) Switch, SC Connectors