

Rugged Ethernet Switches

Catalog Numbers GCL-D8050 and GCL-D6042SC

General Description

These industrial-grade, unmanaged Ethernet switches enable you to expand your industrial networks cost-effectively. The rugged design assures high reliability and stability in harsh environments.

These switches are equipped with high efficiency ColdDesign technology which not only meets the IEEE standards, it also keeps excessive heat problems to a minimum.

The switches are packaged in a compact metal housing with IP30 rating to protect against dusty environments. Both DIN Rail and wall mount are available. Each port has 2 LED's which show the link status transmission speed and collision status.



Cat No GCL-D8050

General Features

- ◆ Ethernet Ports with Auto MDI/MDI-X function
- ◆ Operating temperature: -40°C to +75°C
- ◆ Din Rail or Wall mount
- ◆ Packaged in an IP30 rated rugged metal housing

The GCL-D8050 provides (5) GB ports. It supports both DC and AC power input.

The GCL-D6042SC is equipped with (2) 100FX multi-mode fiber ports that can be used for fiber redundancy or cascaded to your other devices to expand your network application.

It offers a 9-56VDC redundant dual power input design. It also provides a relay output for an event alarm. In the event of a power failure, the built-in LED will activate the alarm to notify administrators. Engineers can simply verify the hardware status by checking the LED, making troubleshooting easy and quick.



Cat No GCL-D6042SC

Specifications	GCL-D8050	GCL-D6042SC
Interface		
Ports	5xRJ-45 10/100/1000 BaseT (X) auto negotiation, Auto MDI/MDI-X function, Full/Half duplex	4xRJ-45 10/100BaseT (X) auto negotiation, 2 FX MultiMode SC connectors, 2km Auto MDI/MDI-X function, Full/Half duplex
LEDs	PW1 (Power 1) Green PW2 (Power 2) Green ERR (Fault) Amber TX/RJ-45 ports: LNK (Link/Active) Green, Flash TX/RX data SPD (Amber): ON-1000MB, OFF-10/100MB	PW1 (Power 1) Green PW2 (Power 2) Green SW (Relay) Amber FX Fiber and TX/RJ-45 ports: LNK (Link Active) Green, Flash TX/RX data
Communications		
IEEE Standards	IEEE 802.3 10Base-T Ethernet, IEEE 802.3u 100Base-TX Fast Ethernet, IEEE 802.3x Flow Control and Back Pressure, IEEE 802.3u 1000Base-T GB Ethernet (<i>GCL-D8050 only</i>)	
Network Cable	UTP/STP above Cat.5e Cable, EIA/TIA-568 10-ohm (100m), Fiber Cable (Multi-Mode): 50/125um,62.5/125um	
Protocol	CSMA/CD	
Switch Specification		
Switch Architecture	Backplane (Switching Fabric): 10Gbps, Store and Forward Processing	
Size	1M Packet Buffer and 8K MAC Address Table	
Flow Control	IEEE 802.3x Flow Control and Back Pressure	
Power / Protection		
Power Consumption	2.76W@48 VDC full load	3.76W@48 VDC full load
Power Supply	Redundant Dual Input 12-56VDC or 18-36VAC	Redundant Dual DC 9V-56V Power Input
Protection	Reverse Polarity, Overload Current	
Alarm Relay Contact	n/a	Relay output 1 A @24 VDC
Mechanical		
Case Dimensions (L x W x D)	103.5mm x 32mm x 81.5mm	142mm x 36.2mm x 105mm
Installation Mounting	DIN Rail mounting or Wall mounting	
Housing	Rugged Metal, IP30 Protection	
MTBF	> 500,000 hrs (MIL-HDBK-217F) at 25°C	
Operating Temperature	-40°C~75°C fully tested	
Storage Temperature	-40°C~85°C	
Operating Humidity	5% - 95% (non-condensing)	
Removable Terminal Block	Wire range: 0.34mm ² to 2.5mm ² , Solid wire (AWG): 12-24/14-22, Stranded wire (AWG): 12-24/14-22, Torque: 5lb-In/0.5Nm/0.56Nm, Wire strip length: 7-8mm	
Certifications		
FCC Part 15 Subpart B Class A, CE EN 55022 Class A (EMI) ITE Equipment (EN55022/24) Railways Applications Electronic Equipment used on Rolling Stock (EN50155) Industrial, Scientific and Medical (ISM) Equipment (EN55011) Railway Applications-Electromagnetic Compatibility-Part 3-2 Rolling Stock-Apparatus (EN50121-3-2) Railway Applications-Electromagnetic Compatibility-Part 4 Emissions and Immunity of the Signaling and Telecommunications Apparatus (EN50121-4) IEC EN60950-1 (SAFETY), CE, FCC (EMC/EMS) EN 50155 / EN 60068-2-6, EN 50155 / EN 60068-2-27, EN 50155 / EN 60068-2-32 (VIBRATION, SHOCK, FREEFALL)		

Ordering Information	
GCL-D8050	5-port GB Industrial Ethernet Switch, with 5 10/100/1000Base-T(X) ports
GCL-D6042SC	6-port Fast 10/100M Industrial Ethernet Switch, with 4x10/100M TX+2 x 100M SC MM 2km