

# Ruggedized Ethernet Switches

Catalog Numbers GCL-D6041AT and GCL-D6042ASC

## General Description

These 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.

These rugged designed Industrial 5 and 6 port Fast Ethernet Switches are equipped with high efficiency ColdDesign technology which not only meets IEEE standard, it also keeps excessive heat problems to a minimum.

They offer a 9V-56V redundant dual power input design. 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. 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.

The GCL-D6042ASC 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.

## General Features

- ◆ Fast Ethernet Ports with Auto MDI/MDI-X function
- ◆ CSMA/CD Protocol
- ◆ Redundant Dual DC input range from 9V-56V
- ◆ Operating temperature: -40°C to +75°C
- ◆ Din Rail and Wall mount supported
- ◆ Packaged in an IP30 rated rugged metal housing
- ◆ GCL-6041AT: 5 ports Fast 10/100M
- ◆ GCL-D6042ASC: 4 ports Fast 10/100M + 2 ports 100FX MM fiber



GCL-D6041AT



GCL-D6042ASC

25603 Red Brangus Drive, Spicewood, TX 78669  
512-264-8390 or 800-SoftPLC (US/Canada)  
FAX: 512-264-8399 info@softplc.com



<http://softplc.com>

Specifications	GCL-D6041AT	GCL-D6042ASC
<b>Interface</b>		
<b>Ports</b>	5xRJ-45 10/100BaseT (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
<b>LEDs</b>	PW1 (Power 1) Green PW2 (Power 2) Green ERR (Fault) Amber TX/RJ-45 ports: LNK (Link/Active) Green, Flash TX/RX data	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
<b>Communications</b>		
<b>IEEE Standard</b>	IEEE 802.3 10Base-T Ethernet, IEEE 802.3u 100Base-TX Fast Ethernet, IEEE 802.3x Flow Control and Back Pressure, IEEE 802.3u 100Base-FX Fast Ethernet (GCL-D6041AT only)	
<b>Network Cable</b>	UTP/STP above Cat.5e Cable, EIA/TIA-568 10-ohm (100m), Fiber Cable (Multi-mode):50/125um,62.5/125um, Fiber Cable (Single-mode):9/125um	
<b>Protocol</b>	CSMA/CD	
<b>Switch Specification</b>		
<b>Switch Architecture</b>	Back-plane (Switching Fabric): 1.2Gbps, Store and Forward Processing	
<b>Size</b>	1M Packet Buffer and IK MAC Address Table	
<b>Flow Control</b>	IEEE 802.3x Flow Control and Back Pressure	
<b>Power / Protection</b>		
<b>Power Consumption</b>	3.76W@48 VDC full load	
<b>Power Supply</b>	Redundant Dual DC 9V-56V Power Input	
<b>Protection</b>	Reverse Polarity, Overload Current	
<b>Alarm Relay Contact</b>	Relay output 1 A @24 VDC	
<b>Mechanical</b>		
<b>Case Dimensions (L x W x D)</b>	142mm x 36.2mm x 105mm	
<b>Installation Mounting</b>	DIN Rail mounting and Wall mounting	
<b>Storage Temperature</b>	-40°C~85°C	
<b>Housing</b>	Rugged Metal, IP30 Protection	
<b>MTBF</b>	510,304 hrs (MIL-HDBK-217F) at 25°C	
<b>Operating Temperature</b>	-40°C~75°C fully tested	
<b>Operating Humidity</b>	5% - 95% (non-condensing)	
<b>Removable Terminal Block</b>	6 Pin: (2) Redundant power, Alarm relay contact Wire range: 0.34mm <sup>2</sup> to 2.5mm <sup>2</sup> , 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	
<b>Certificates</b>		
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)		

<b>Ordering Information</b>	
<b>GCL-6041AT</b>	5-port Fast 10/100M Industrial Ethernet Switch, with 5x10/100m TX
<b>GCL-D6042ASC</b>	6-port Fast 10/100M Industrial Ethernet Switch, with 4x10/100M TX+2 x 100M SC MM 2km