

- Compact Size
- 10BASE-T/100BASE-TX compliant
- Auto-MDI/X ports
- Auto-negotiated data rate, duplex and flow control
- Low cost
- Panel and DIN-rail mountable versions
- Powered from an unregulated DC power source (10–36 V) or from an AC power source (8–24 V, 47–63 Hz). Power is provided through a quick disconnect terminal strip.
- Broadcast storm control
- Full- or half-duplex
- Activity/link and data rate LEDs
- Industrial environment EMC
- CE Mark
- UL 508 Listed Industrial Control Equipment

Applications

- Building monitoring
- Environmental control
- Ethernet I/O
- Test and measurement
- Remote data acquisition
- Security systems
- Card access systems

Connectivity for automation systems have unique needs—convenient mounting, simple and dependable operation, low-voltage input power and especially low-cost. Compact and rugged units meet these needs: the **GC-ENET-SW5** for panel mounting.

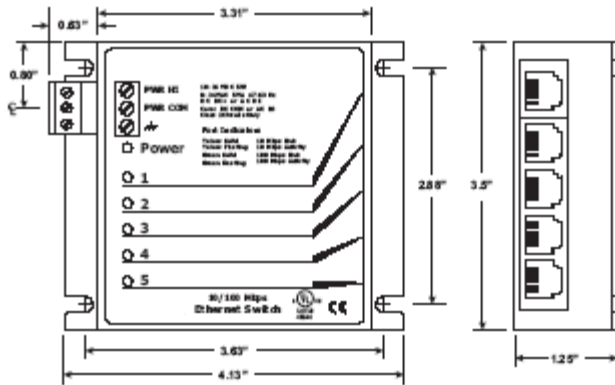
Although small and low-cost, switches are very capable devices. Utilizing switching technology, they provide five 10/100 Mbps shielded RJ-45 ports. Each port supports the auto-negotiation protocol in order to select data rate, duplex and flow control. Both half- and full-duplex operation are supported as well as flow control. For half-duplex links, the Backpressure scheme is used. For full-duplex links, the PAUSE scheme is supported. All five ports are auto-MDI/X compliant and therefore any port can operate as an uplink port to another switch, eliminating the need for crossover cables in the field. All these features require no operator intervention, making the switches truly plug and play.

Switches address one of the biggest issues in automation systems and that is convenient mounting in control panels. Office-grade equipment is intended for desktop operation and requires a separate power supply that needs to be powered from a 120/230 Volt AC mains circuit. This usually requires a shelf to be constructed to mount the unit and a duplex receptacle to be installed inside the control panel. Switches are intended for sub-panel mounting and can be powered from the same control transformer that is used to power the other equipment, making the installation neat and rugged. Switches can be powered from a low voltage, wide-range DC power source as well. The activity LEDs on these units face the technician, thus easing troubleshooting. The label on the unit can be written upon so that port connections can be documented as to the location of connected equipment.

Unlike office-grade equipment these units are intended for commercial and industrial applications. They have a wider operating temperature range and comply with global industrial electromagnetic compatibility standards so there is no concern about installing these switches in the harshest of sites. They are UL 508 Listed for Industrial Control Equipment.

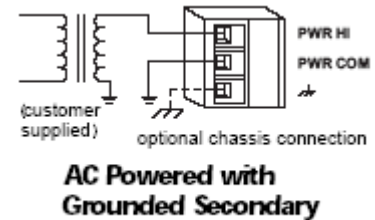
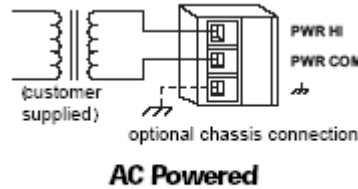
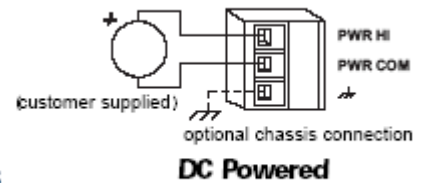
The auto-negotiation protocol allows these switches to link with any compatible 10BASE-T or 100BASE-TX device. They will function with any application layer that works with Ethernet. These units have built-in broadcast storm control to prevent excess broadcasts from degrading network performance.

To aid in troubleshooting, each port LED is lit solid if a valid link exists to an attached device, flashes to show activity and indicates data rate by color: green for 100 Mbps and yellow for 10 Mbps. A separate green LED indicates the device is powered.



Specifications		
Electrical	DC	AC
Input voltage	10–36 Volts	8–24 Volts
Input power (max)	5 Watts	5 VA
Input frequency	N/A	47–63 Hz
Environmental		
Operating temperature	0°C to +60°C	
Storage temperature	–40°C to +85°C	
Relative Humidity	10% to 95% non-condensing	
Protection	IP 30	
Functional		
Compliance	ANSI/IEEE 802.3	
Data rate	10/100 Mbps	
Signaling	10BASE-T/100BASE-TX	
Port connectors	Shielded RJ-45	
Segment length (max)	100 m	
LED indicators ¹	ACTIVITY/LINK/DATA RATE—green or yellow POWER—green	
Flow control	Half Duplex—Backpressure Full Duplex—IEEE 802.3x (PAUSE)	
Aging	200 to 300 seconds	
Approvals	CE Mark, UL 508 Industrial Control Equipment	

Power Options



Electromagnetic Compatibility			
Standard	Test Method	Description	Test Levels
EN 55024	EN 61000-4-2	Electrostatic Discharge	6 kV Contact & 8 kV Air
EN 55024	EN 61000-4-3	Radiated Immunity	10 V/m 80 MHz to 1 GHz
EN 55024	EN 61000-4-4	Fast Transient Burst	1 kV Clamp & 2 kV Direct
EN 55024	EN 61000-4-5	Voltage Surge	1 kV L to L & 2 kV L to Earth
EN 55024	EN 61000-4-6	Conducted Immunity	10 Volts(rms)
EN 55024	EN 61000-4-11	Voltage Dips & Interruptions	1 line cycle to 5 sec. @ 100% dip
EN 55022	CISPR 22	Radiated Emissions	Class A
EN 55022	CISPR 22	Conducted Emissions	Class B
CFR 47, Pt.15	ANSI C63.4	Radiated Emissions	Class A