

# **Specification Sheet G2S600CE-001**

Mainframe with 6 Slot Module Bay Accepts G2 Plug-in Modules Model G2S600CE

September 2006

## General

The G2S600CE is part of the new G2 family of switching products. The unit provides the systems engineer with one of the best integrated solutions for controlling and packaging a large variety of switching modules and cards in a small rack mounted area. Powerful and streamlined multiprocessor control features (C710 control CPU/Interface) allow the user to smoothly integrate the G2S600CE to fit a multitude of applications.

Different types of function modules from the G2 product line may be installed for various switching and processing functions depending on your application. Both solid-state and relay-based switching modules may be installed within seconds. A selection of plug-in modules cover a frequency range of DC to 40GHz, and switching configurations from 1x2 to 48x48.

Designed to be the most flexible switching system on the market, the G2S600CE product delivers just that. It is part of the family of the next generation of switching systems to meet today's and tomorrow's needs for high performance and cost effective switching solutions of signals ranging from DC to 40GHz.

## **Example Model Number**

### G2S600CE-D200

This specifies the G2S600CE mainframe with dual (redundant) -200 type power supply sections and includes the standard front panel control and display.

# **Applications**

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The advanced and sophisticated features of the G2S600CE, allows it to be used in numerous applications:

- Switch signals with frequencies DC to 40GHz
- Video signal routing including CCTV or RGB (+HVS)
- HF receive antenna switching
- Airborne surveillance systems
- Radar X-Y-Z data switching
- NTSC, PAL, SECAM signal routing
- ATE test stations
- Production studios or security systems
- Instrumentation
- Precision audio routing
- Fiber optic switching and ATE test systems

## **Features**

- Six position module bay for G2 plug-ins
- Front panel LED back-lit keypad controls
- High contrast vacuum-fluorescent display
- Accepts the advanced C710 controller card
- Various remote interface choices
- Rugged 3RU high aluminum chassis (5.25")
- International AC power range
- Dual AC inputs
- Hot-swap self-monitoring plug-in power supplies (optional)
- Rack mount design (19 inch)
- Built-in chassis slide mounting (slides not included)



Front view with hinged front panel open exposing dual (redun dant) plug-in power supplies





G2S600CE-001

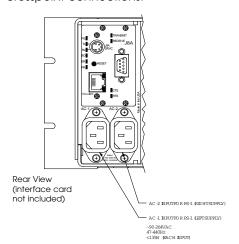
## G2S600CE Mainframe

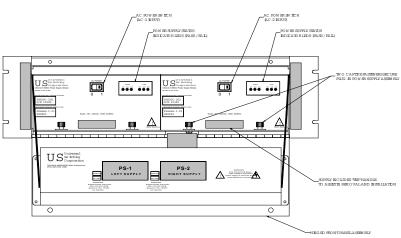
The G2S600CE mainframe/controller is equipped with coolrunning switching power supplies and user friendly front panel display and controls. The unit also accepts the C710 multi-purpose CPU and interface card in the rear to provide main system control functions and remote user control interfaces. All standard interfaces are available, Ethernet, Serial (RS-232C, RS-422A, RS-485) and GPIB (IEEE-488). In addition to these standard interfaces is an **US-LINK** port to link to remote control panel assemblies.

System control options and switching configurations are stored in non-volatile memory (Lithium-backed RAM). Up to 199 different switching configurations may be stored in memory and may be recalled with a single command. This greatly simplifies control of commonly used configurations. For power up conditions, the system may be set to recall the last configuration since power down, or to completely clear all crosspoint connections.

The G2S600CE mainframe is available with different power supply configurations to match the type of module series being installed into the module bay. The first digit of the suffix number is used to define the power supply configuration. The power supplies are Smart-Supplies where they monitor themselves and report problems to the installed control CPU. The power supply installs through the hinged front panel and is available in a Hot-Swap redundant configuration for critical applications.

LabVIEW drivers are available upon request. To order a complete system including the G2S600CE, CPU/Interface card (Series C710) and switching modules, contact the factory for a system model number. This number defines a certain group of modules and assemblies including quantity and type. The system will be shipped fully assembled, tested and will also include an operations and programming manual.





Size	5.25"H x 19.00"W x 20.00"D
Local control	24 position LED illuminated keypad
	Display4x20 vacuum fluorescent
	LED illuminated (front panel)
AC power	90-264VAC, 47 to 440Hz, <135W (each)
AC connector	Dual AC inputs (independent)
Power cord	Dual Belden 17250 supplied (115VAC)
Front panel color	FED-STD-595B #26440 (light gray)
Front panel thickness	1/8" (std), 3/16" optional
Mounting	Chassis-Trak <sup>®</sup> mounting provided
Capacity	Up to six single height modules
	may be installed
Control type	G2 compatible
Cooling	Dual fan assisted
Venting	Vents located on side of unit
Supply capacity	
Supply type	Hot-swap switching supplies

Weight	20lbs
Operating temp	0 to +65C
Non-operating temp	20 to +75C
Humidity	0 to 95% (non-condensing @ +25C)
Mounting	RETMA slots (EIA), 3U high
Chassis finish	Black texture paint & gold iridite
Handles	Black anodized
MTBF	>125,000 hours per MIL-STD-217E, N1
Certifications	<b>C€</b> EN61010

Power Supply Types		
	-100	Standard supplies: +5V logic and +/-15V analog
	-200	Standard supplies: +5V logic and +/-5V analog
	-207	Standard supplies: +5V logic and +7/-5V analog
	-600	Standard supplies: +5V logic and +15V analog
	-D100	Redundant supplies: +5V logic and +/-15V analog
	-D200	Redundant supplies: +5V logic and +/-5V analog
	-D207	Redundant supplies: +5V logic and +7/-5V analog
	-D600	Redundant supplies: +5V logic and +15V analog

(CPU / Interface card must be ordered separately - see below)

### Series C710 CPU / Interface Cards

The G2S600CE accepts the C710 CPU/interface cards for controlling the system from a remote computer. Choose the interface type for your requirement. Setup parameters such as baud rate or GPIB address are modified via the front panel controls. See the Series C710 data sheet for detailed information on the interface card types.

C710-E10 Ethernet only with TCP/IP

C710-S3 Ethernet & Serial (RS-232C, RS-422A or RS-485)

C710-488 Ethernet & GPIB port (IEEE-488)

