

SY5527LC

**Universal
Multichannel Power
Supply System Low
Cost / 19" wide, 4U-
high (4 slot)**



Features



- Houses up to 4 boards
- More compact and handy
- ~20 cm shorter than the standard version
- Communications via Gigabit Ethernet
- Communications via Wi-Fi (optional)
- OPC Server to ease integration in DCS
- Fast, accurate setting and monitoring of channel parameters
- Live insertion of boards
- Advanced Trip handling
- Hardware current protection
- Secure access to the system via Intranet
- Application software for remote control
- Graphical web interface
- Easy firmware upgrading

Description

The **SY5527LC** system is the Low Cost compact version of a new line of power supply systems which represent CAEN's latest proposal in the matter of High Voltage and Low Voltage Power Supplying. This system outlines a completely new approach to power generation and distribution by allowing the housing, in the same mainframe, of a wide range of boards with different functions, such as High/Low Voltage boards, generic I/O boards (temperature, pressure monitors, etc.) and branch controllers, where the latter are used to control other remote generators and distributors. Modularity, flexibility and reliability are the key-points of its design, enabling this module to meet the requirements needed in a wide range of experimental conditions. The mainframe is housed in a 4U-high euro-mechanics rack and hosts four main sections:

- the Board Section, with 4 slots to house power supply boards, distributors and branch controllers;
- the Fan Tray Section, housing 3 fans, with programmable rotation speed regulation;
- the Power Supply Section, which hosts the 400 W power supply unit;
- the CPU Section which includes all interface facilities.

The User Software Interface features the usual friendliness of the previous CAEN systems. The complete line of power supply boards and distributors that has been specially developed for **SY1527** and **SY2527** are fully compatible with the new mainframes.

The system allows also to deal with power supply solutions composed by "branch controllers (housed in the system mainframe) and on-detector remote boards (manufactured in order to be magnetic field and radiation tolerant). A sophisticated trip handling via software allows to control and correlate trip conditions on the channels of the crate. Live insertion and extraction of the boards, which reduces the down time of the global system and eases access to the computing core and peripherals of the system, complete the system flexibility. Easy interfacing is another key-point of the SY5527LC system. The Gigabit Ethernet interface (and the optional Wi-Fi interface) allows both an easy web access and the connection via OPC Server to a SCADA control system. Enhanced software programming features a unified command set independent from the interface used to communicate with the system. Handy maintenance and upgrading, which constitute a major issue in the reliability of a system, are further guaranteed by the possibility of accessing and servicing the system via network facilities.

Advanced Software

The new SY5527LC takes advantage of a complete set of **Software Tools** to control the unit and all the parameters of the High Voltage and Low Voltage boards, from low level **libraries** to **graphical application** software.

In addition the advanced version of the GECO2020 software introduces **Logging and Scripting Capability**.

The Logger is a useful tool which records every command sent to the system and every warning/alarm detected by the system. In this way it is possible to automatically monitor the behavior of every single parameter during operations. Complex and advanced commands can be managed through the Scripting capability. Based on a simple proprietary syntax, this tool ensures flexible and fully customizable control on every system and board aspect.

Two new powerful improvements has been carried out on the new backplane:

- A new 48V Power Bus distribution
- FLEXRAY Fast Serial Link

Technical Specifications

Packaging

- 19"-wide, 4U-high Euro-mechanics rack;
- Width: 19" (483 mm);
- Height: 4U (177 mm);
- Depth: 493mm (453 mm without handles)

Weight

Mainframe: 9 kg

Power Requirements

- Voltage range: 100/240 Vac Frequency: 50/60Hz;
- Max current : 8A
- Max power : 700 W @ 220 Vac 660 W @ 110 Vac

Cooling Fans

4 x 120x120 24V 9GV1224P4G01

Ventilation sound pressure level

- High: 78.5 dBA
- Medium: 67.5 dBA
- Low: 48 dBA

Max. number of boards per crate

4

Primary Power Supply Unit Output Power

- 400 W (220 Vac Mains)
- 350 W (110 Vac Mains)

Communication

- Gigabit Ethernet
- Wi-Fi (optional)

Software

- Graphical interface control software
- OS Platforms: MS Windows, Linux
- Web Configurator tool

Enhanced Software (optional)

Includes advanced features like Logging, Scripting, Alarm handling

Additional features

- OPC Server compatibility
- Removable fan unit
- FLEXRAY Fast Serial Link

Environmental requirements

- Operating temperature: from 5°C to +40°C
- Operating humidity: from 10% to +90% non-condensing
- Storage temperature: from -30°C to +80°C
- Storage humidity: 5% to 90% non-condensing

Ordering Options

Code	Description
WSY5527LCXAA	SY5527LC - 4 Slot LOW COST Universal Multichannel Power Supply System RoHS

Related Software

OPC Server



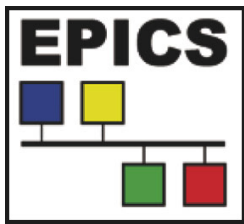
OPC Server for CAEN Power Supplies

HIVOCS



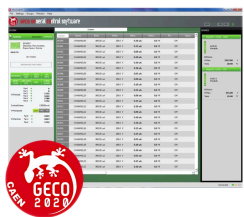
Web based Control Software for SY4527 and SY5527 Systems

EPICS IOC (SY4527 / SY5527)



EPICS IOC for SY4527 and SY5527 Systems

GECO2020



General Control Software for CAEN HV Power Supplies

Related Software Libraries

CAEN HV Wrapper Library



Library for CAEN Power Supply Control

Gallery



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