## **SY127**

40 Channel High Voltage System

**Family: Power Supply** 

OPC | Acti

Active HU

HS CHENET

- Password protected access.
- Up to 4000 channels controlled from a single point.
- Under and over-voltage signalling and overcurrent protection for each channel.
- Non-volatile memory of high voltage values and all operational parameters.
- Remote control through: CAMAC Controller mod. C 139; VME Controller mod. A 200; PC CAENET Controller mod. A303/A303 A/A1303; CAMAC Controller mod. C 117B; VME Controller mod. V 288; G64 Controller mod. A 199HS.G64 Controller mod. A 199 (via H.V. CAENET)
- RS232C port
- Local control via on-board alphanumeric key-pad and display.
- Friendly software user interface.
- Positive and negative polarity
- Highly flexible: designed to power a wide range of detectors

## Overview

The SY127 is a High Voltage System featuring modularity and high flexibility. The System has been designed to power a wide range of detectors. Suitable for both major experiments and for the laboratory tests.

It consists of one Std. 19" Euro Crate that houses a Control Unit at the front, and HV plug-in Channels (Model A 300 - A 400 - A 600) at the rear.

The SY 127 features a powerful software with a friendly User interface, together with sophisticated overvoltage and overcurrent protections.

The SY127 can be locally monitored and controlled via on-board alpha-numeric keypad and display. Remote control is possible via RS-232-C port and either H.V. CAENET (for Mod. SY127HV) or HIGH SPEED CAENET (for Mod. SY127HS). Thanks to the new communication controller Mod. A128HS, it is possible to upgrade older systems, previously controlled via H.V, CAENET, to H.S. CAENET (please check with CAEN firmware compatibility of older SY127 systems)

Non-volatile memory of HV values and all operational parameters. Access is password protected.

**Technical Specification Table** 

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| Size                                 | 4 Eurocard units and 19" wide  |  |  |  |
|--------------------------------------|--|--|--|--|
| Shipping weight (full load)          | 35 Kg + packaging  |  |  |  |
| Power supply                         | 220 V/ 50 Hz - 115 VI 60 Hz (switch selectable)                                |  |  |  |
| Maximum power dissipation            | 850 W  |  |  |  |
| Humidity range                       | 0 - 90 %   |  |  |  |
| Operating temperature                | 0 - 45 °C  |  |  |  |
| No. of Mainframes/System             | Max. 100, daisy-chained  |  |  |  |
| No. of HV<br>Modules/Mainframe       | 10 slots per crate; POS and NEG HV modules can be intermixed in the same crate |  |  |  |
| No. of HV<br>Channels/Mainframe      | Max. 40 (4 ch x 10 modules)  |  |  |  |
| Local Control access                 | A 16-key keyboard and a 14 character alphanumeric LED display                  |  |  |  |
| Remote Control access                | RS232C, CAMAC, VME, PC, G64  |  |  |  |
| Remote/Local controllable parameters | Voltage (2 ranges), Current (2 ranges), Ramp-up, Ramp-down, Trip-off           |  |  |  |
| Remote/Local monitored parameters    | Voltage, Current, channel status   |  |  |  |
| Alarm                                | On TRIP, OVV, UNV conditions   |  |  |  |
| Restart at Power-on                  | Automatic restart after power-on or reset                                      |  |  |  |
| HV enable                            | Front panel switch for HV Enable/Disable                                       |  |  |  |
| Reset input                          | Front panel LEMO input for NIM signal  |  |  |  |
| Manual reset                         | Front panel switch   |  |  |  |
| KILL input                           | Front panel LEMO input for NIM signal  |  |  |  |
| Interlock                            | Simultaneous programmable High or Low switching-off of all channels            |  |  |  |
| Password protection                  | Password control for parameter setting   |  |  |  |
| DAC                                  | 12 bit   |  |  |  |
| ADC                                  | 12 bit   |  |  |  |
| EEPROM                               | Non-volatile memory for all parameters   |  |  |  |
| Output Voltage Temp                  | Max. 0.005% °C   |  |  |  |
| HV long term stability               | ± 2V ±1 LSB  |  |  |  |

Ordering Options

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| Code         | Version | Description  | Available | New |
|--------------|---------|--|-----------|-----|
| WSY127CHASSX | SY127HV | 40 Channel High Voltage<br>System (HV CAENET<br>Mainframe) | •         |     |
| WSY127CHASSY | SY127HS | 40 Channel High Voltage<br>System (HS CAENET<br>Mainframe) | •         | -   |

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