



Card for inserting in power supply



External Module

PSC 488 & PSC 232 - Power Supply Controllers

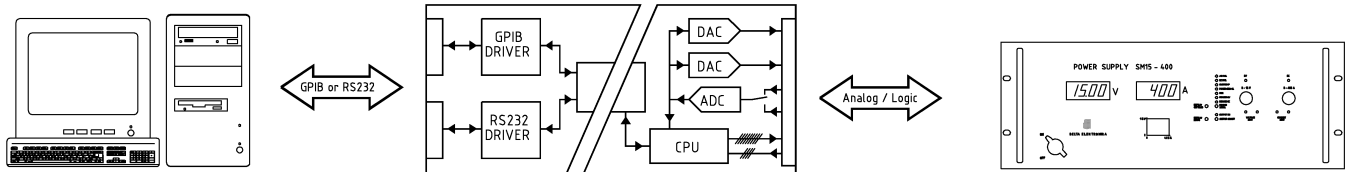
Interface between PC and analog programmable Power Supply

- IEEE488 or RS232 interfaces designed to be used with analog programmable power supplies
- Build-in Card or External Module

Features

- Voltage and current of the power supply can be programmable and monitored
- Read back of status signals
- Set the power supply in Remote/Local, Remote ShutDown etc.
- Two 14 bit output channels for programming, two 12 - 16 bit input channels for monitoring
- Software calibration, no trimmers
- Up to 15 PSC's on one IEEE488 or RS232 BUS to control multiple supplies

Programming



IEEE488

- The PSC 488 programs a power supply through the IEEE488 Bus
- PSC 488 EXT : external module for bench operations or rail mounting

Note: the PSC 488 models can be also configured for RS232 programming.

RS232

- The PSC 232 programs a power supply through the standard serial RS232 port on a computer
- PSC 232 EXT : external module for bench operation or rail mounting
- Switch selectable baudrate 2400, 4800, 9600 or 19600

The PSC allows three groups of commands:

- IEEE488.2 Common Commands
- SCPI (standard Commands for programmable Instruments)
- DPC (Delta Programmable Commands) emulation mode of the old PSC44M (for compatibility only).

The PSC can be programmed using languages like Basic, Pascal, C, Visual Basic, Delphi, Hpvee, Testpoint, LabVIEW etc. Some software examples are available from the website via [link](#).

Analog inputs

- Two 14 bit analog outputs
- Software full scale calibration
- Software offset calibration
- Linearity error 1 LSB
- TC typical 30 ppm/°C

Analog outputs

- Two 12 -16 bit analog input channels
- Software full scale calibration
- Software offset calibration
- Linearity error +/- 2 LSB
- TC typical 30 ppm/°C

Each analog in- and output can be set or read. Analog voltages are standardized on 0 - 5 V. Analog in- and outputs have a common zero.

Status monitoring

The PSC provides logic status inputs to monitor the status signals of the power supply as CC mode, current and voltage limit, DC fail, AC fail, and Over temperature.

Controls

Remote ShutDown: enables or disables the output voltage of the power supply.
 REMOTE: Switches from manual control to remote control (not on PSC-488 or the PSC-232 modules).

User Inputs

The PSC-232 module and the PSC-488 module provide two 600 V opto-isolated logic inputs with common zero for custom use. The input impedance is 470 Ohm, Logic high = 2.5 ... 8 V, Logic low = 0 V.

User outputs

The PSC-232 module and the PSC-488 module provide two 600 V opto-isolated, logic, open collector outputs with common zero for custom use. The outputs collector emitter maximum rating is 50 V / 4.5 - 7 mA. See User Manual for more details.

Software & Accessories

Example software and User Manual in PDF format can be downloaded from the website via [link](#).
 The PSC modules are supplied with an analog programming cable, an RS232 cable and a line cord.
 The PSC build-in cards are supplied with an RS232 cable.

General

Temperature: Operating temperature -20 to +50 °C, Storage temperature -40 to +85 °C.
 Humidity: Max. 95% RH, non condensing, up to 40 °C, max. 75% RH, non condensing, up to 50 °C.
 Insulation: GPIB or RS232 to Case is 600 VDC reinforced insulation, Logic I/O to Case is 600 VDC reinforced insulation.

External Module PSC-488 EXT, PSC-232 EXT

Enclosure

Dimensions (h x w x d) = 89 x 85.5 x 118.5 mm
 Weight 0.7 kg
 Degree of protection: IP20

Insulation

GBIB or RS232 to case, Logic in- and outputs to case: 600 VDC
 Analog in- and outputs to case: 600 VDC
 Line input to case: 2500 VAC

Input Power

Rated voltage 230VAC. Wide range 98 - 264 VAC, 48 - 62 Hz
 Power consumption 10 W
 Hold-up time @ 110 VAC : 80 ms, @ 230 VAC : 300 ms

EMC

Emission : EN 61000-6-3, residential, light industrial environment
 EN 55022B
 Immunity : EN 61000-6-2, industrial environment

Ordering Information

Models	IEEE488	RS232	Comments
ES150	Not available	Option P148	Analog programming connector removed
ES300	Not available	Option P180	Analog programming connector removed
SM800	Option P255	Option P254	Analog programming connector still available
SM1500N	Option P184	Option P183	Analog programming connector still available
SM6000	Option P156	Option P155	Analog programming connector still available except on models SM300-20 & SM600-10.