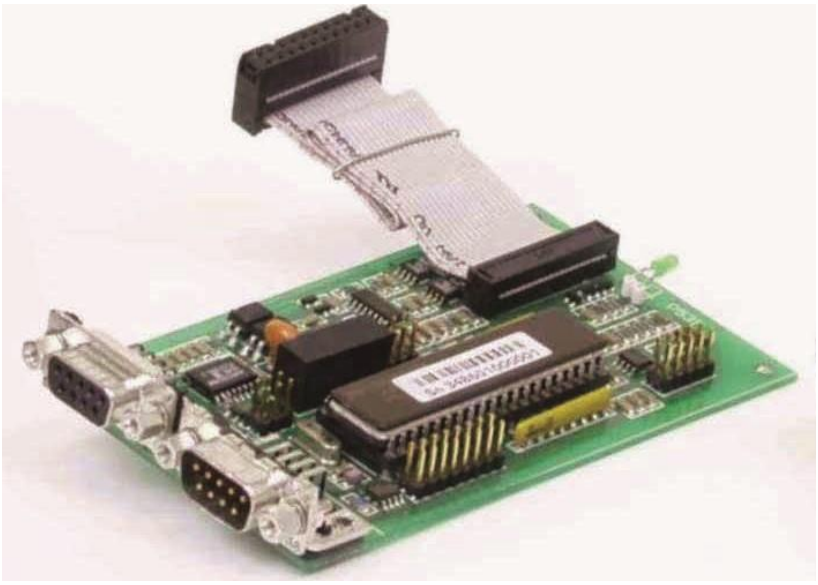
**DELTA** ELEKTRONIKA B.V.
DC POWER SUPPLIES

Vissersdijk 4, 4301 ND
Zierikzee, the Netherlands

www.DeltaPowerSupplies.com
Tel. +31 111 413656



*Card for inserting in power supply*

# PSC 232 - Power Supply Controller

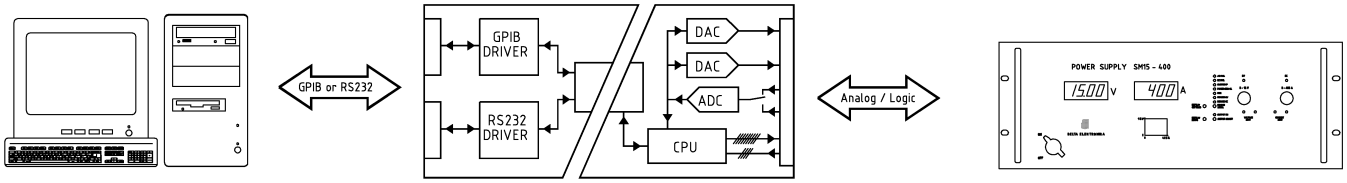
## Interface between PC and analog programmable Power Supply

- 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 RS232 BUS to control multiple supplies

## Programming




## RS232

- The PSC 232 programs a power supply trough 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 two groups of 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 VDC. 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 the PSC-232 modules).

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

**User outputs**
The PSC-232 module provide two 600 VDC opto-isolated, logic, open collector outputs with common zero for custom use. The outputs collector emitter maximum rating is 50 VDC / 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 - 50 °C, Storage temperature –40 - 85 °C. |
| Humidity: | Max. 95% RH, non condensing, up to 40 °C, max. 75% RH, non condensing, up to 50 °C. |
| Insulation: | RS232 & Logic I/O to Case 600 VDC (reinforced insulation). |
| | RS232 & Logic I/O to 'minus' DC Power terminal 600 VDC (reinforced insulation). |

## External Module 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
RS232 & Logic in- and outputs to case: 600 VDC
Analog in- and outputs to case: 600 VDC
Mains 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 61326-1, class B equipment (for use in domestic establishments)
Immunity : EN 61326-1, equipment for use in industrial and domestic establishments

## Ordering Information

| Models | RS232 | Comments |
|---|---|---|
| ES150 | Option P148 | Analog programming connector removed |
| ES300 | Option P180 | Analog programming connector removed |
| SM800 | Option P254 | Analog programming connector still available |
| SM1500N | Option P183 | Analog programming connector still available |
| SM6000 | Option P155 | Analog programming connector still available except on models SM300-20 & SM600-10. |