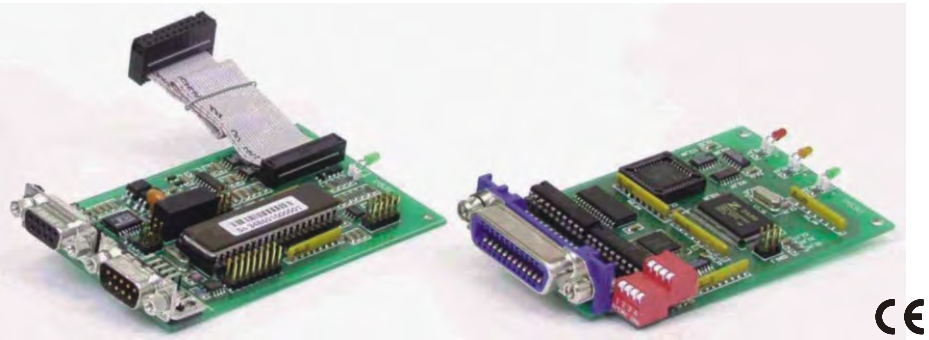
DELTA ELEKTRONIKA B.V.
DC POWER SUPPLIES

Vissersdijk 4, 4301 ND
Zierikzee, the Netherlands

www.DeltaPowerSupplies.com
Tel. +31 111 413656

External PSC module



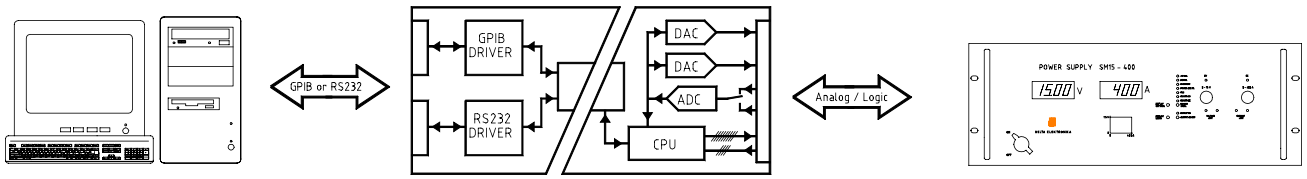
Internal PSC card

POWER SUPPLY CONTROLLERS

Interface between Computer and analog programmable Power Supply.

Features

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



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 trough the standard serial RS232 port on a computer
- PSC 232 EXT : external module for bench operation or rail mounting

Models	IEEE488	RS232	Comments
ES 150 - Series	Not available	Option P148	Analog programming connector removed
ES 030 - 10	Not available	Option P180	Analog programming connector removed
SM 800 - Series	Option P255	Option P254	Analog programming connector still available
SM 1500 - Series	Option P184	Option P183	Analog programming connector still available
SM 3000 - Series	Option P164	Option P146	Analog programming connector removed
SM 6000 - Series	Option P156	Option P155	Analog programming connector still available **

***Note : Except on SM 600-10 and SM 300-20*

Schulz Electronic
Professional Power Supplies
Schulz-Electronic GmbH
Dr.-Rudolf-Eberle-Straße 2
D-76534 Baden-Baden
Fon + 49.7223.9636.0
Fax + 49.7223.9636.90
vertrieb@schulz-electronic.de
www.schulz-electronic.de

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 ect.
Some software examples are available from www.DeltaPowerSupplies.com

Analog outputs

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

Analog inputs

- 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 voltage are standardized on 0 - 5 V.
Analog in- and outputs have a common zero.

Status monitoring

The PSC privides 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 / Disables the output voltage of the power supply.

REMOTE : Switches from manual control to remote control (not on PSC-488 and the PSC-232 modules)

User Inputs

The PSC-232 module and the PSC-488 module provide two 1000 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 1000 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 (total dissipation max mW). See manual for more details.

PSC-488 module and PSC-232 module

Dimensions (h x w x d)

89 x 85.5 x 118 mm, 0.8 kg

Input Power

Wide range 98-264 V AC 48-62 Hz
Power consumption 10 W
Hold-up time 300 ms at Vin = 230 V AC
80 ms at Vin = 110 V AC

Isolation

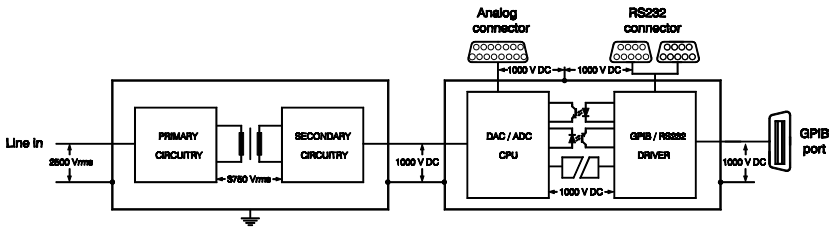
Analog/logic in- and outputs to case : 1000 V DC
GPIB or RS232 to case : 1000 V DC
Line input to case : 2500 V AC

Ambient temperature

Operating 0 to +55 °C
Storage -20 to +70 °C

EMC

Emission : EN 61000-6-3, industrial environment
EN 55022**B**
Immunity : EN 61000-6-2, industrial environment
Enclosure: IP20



Following is supplied with the PSC's

Accessories	PSC-232 module	PSC-232 card	PSC-488 module	PSC-488 card
RS232 cable	X	X	X	X**
Analog cable	X		X	
Line cord	X		X	
CD ROM*	X	X	X	X

** CD ROM contains example software and manual.*
*** Except in combination with SM3000 (Option P164).*