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External Module

Built-in Card

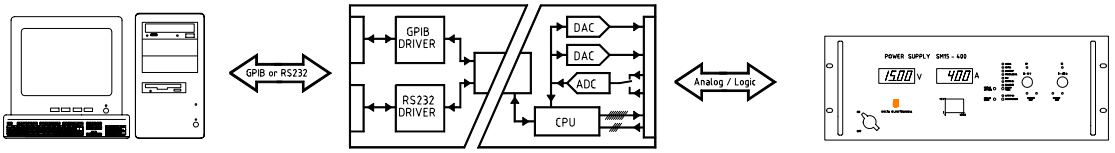
PSC 488 → IEEE488 BUS COMPATIBLE
PSC 232 → RS232 BUS COMPATIBLE

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 programmed and monitored
- Readback 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
- Up to 15 PSCs on one IEEE488 or RS232 BUS to control multiple supplies
- Software calibration, no trimmers



IEEE488 Programming

The PSC 488 programs a power supply through the IEEE488 Bus.
Note: the PSC 488 models can also be configured for RS232 programming.

RS232 Programming

The PSC 232 programs a power supply through the standard serial RS232 port on the computer.

- **PSC 488 EXT** *: external module for bench operation or rail mounting*
- **PSC 232 EXT** *: external module for bench operation or rail mounting*

Ordercodes for built-in and calibrated interfaces			
	IEEE488	**RS232**	**Comments**
ES150 - series	not available	Option P148	Analog programming connector removed
ES030-10	not available	Option P180	Analog programming connector removed
SM800 - series	Option P255	Option P254	Analog programming connector still **available**
SM1500 - series	Option P184	Option P183	Analog programming connector still **available**
SM3000 - series	Option P164	Option P146	Analog programming connector removed
SM6000 - series	Option P156	Option P155	Analog programming connector still **available**

The PSC allows three groups of commands:

- IEEE488.2 Common Commands
- SCPI (Standard Commands for Programmable Instruments)
- DPC (Delta Programming 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 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 standardised 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 such as CC mode, current or 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 PSC488 EXT and PSC232 EXT)

User Inputs

The PSC232 EXT and the PSC488 EXT 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 PSC232 EXT and the PSC488 EXT provide two 1000 V opto-isolated, logic, open collector outputs with common zero for custom use. The output collector emitter maximum rating is 50 V / 4.5 - 7 mA (total dissipation max. 150 mW). See manual for more details**.**

PSC 488 EXT and PSC 232 EXT

Dimensions (h x w x d)

89 x 85.5 x 118 mm, 0.8 kg

Input Power

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

Isolation

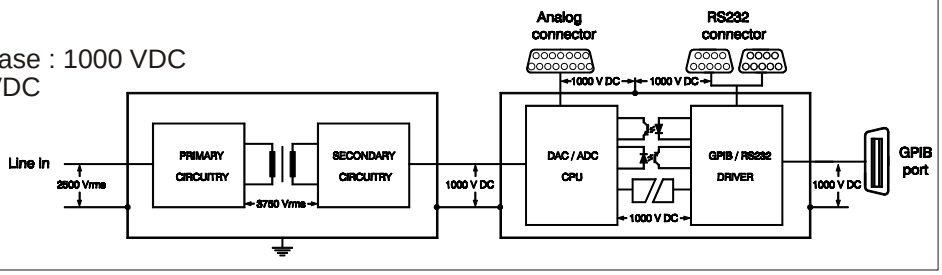
Analog/logic in- and outputs to case : 1000 VDC
GPIB or RS232 to case : 1000 VDC
Line input to case: 2500 VAC

Ambient temperature

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

EMC

Emission: EN61000-6-3, industrial environment
EN55022B
Immunity: EN61000-6-2, industrial environment
Enclosure: IP20



Following is supplied with the PSC's:

Accessories	PSC 232 EXT	PSC 232 built-in	PSC 488 EXT	PSC 488 built-in
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).*