



Card for inserting in power supply



External Module

## PSC-ETH-2 - Ethernet Power Supply Controller

### Interface between Ethernet IP Network and Power Supply

- IP-address configurable by user
- Build-in Card or External Module

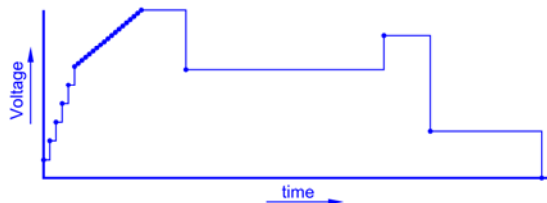
### Features

- Programming & Monitoring resolution 16 bit
- Web Interface
- Digital user in and outputs (isolated)
- Change power supply modes (Remote/Local etc.)
- Read-back of status signal
- Programming & Monitoring accuracy  $\pm 0.1\%$
- DHCP Operation
- Integrated Sequencer
- Software Calibration
- SCPI commands

### Integrated sequencer



Arbitrary Waveform generator or standalone automation. The sequencer is integrated in the Ethernet controller. User defined Waveforms can be stored in the sequencer.



- Converts a power supply into an Arbitrary Waveform Generator
- Ideal for repetitive testing and automotive
- Can work like a PLC or stand-alone automation: steps interact with the actual in- and outputs
- Waveform generator independent of computer Stand-alone operating possible
- Battery voltage simulation, Surges, Function generator, etc.
- 25 free sequences having max. 2000 steps each
- Combination of fast and very slow sequences
- Steps from 1 ms till hours

### Web Interface



- Setting & Monitoring of voltage and current, actual and set values
- Setting & Monitoring Output On/Off
- Monitoring Status Icons: DC-fail, CC-mode, PSOL, Over Temp etc.
- Sequencer Uploading and Selecting
- Running, Pausing, Stopping and Triggering of Sequences
- Running in Single Step Mode

## The Sequencer

The PSC-ETH can control the power supply by a sequence without the need of an external computer.

The sequencer can even control the user outputs and read the user inputs.

A sequence is built from user programmable steps (or program lines).

A sequence step can do the following:

- Set the output Voltage and Current
- Jump to defined step number, unconditional or under condition of: Digital outputs or inputs, Variable, output voltage or current.
- Increment or Decrement output Voltage, Current or Variable
- Possibility to create loops, subroutines, ramps etc.
- Set a Digital output (8 available)
- Wait for trigger from Computer or Pause
- Set an internal Variable or internal Timer (resp. 8 or 2 available)

Sequences can be started / paused / stopped by: Commands via Ethernet (software) or by User Inputs (hardware) or Web.

Using digital user inputs for starting or stopping a sequence, makes it possible to choose the sequences by selecting the corresponding input, without being connected to a computer.

## Analog inputs and outputs

The 2 analog in- and outputs have a 16 bits resolution. Offset and full scale can be software calibrated.

Input linearity error is +/- 1 LSB, output linearity error is +/- 2 LSB. TC typical is 10 ppm / °C.

Each analog in- and output can be set or read. Analog voltages are standardized on 0 - 5 V (with optional Power Sink  $I_{mon} = -5 V - 5 V$ ).

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, Over Temperature, PSOL, etc.

## Controls

Remote ShutDown: Enables / disables the output voltage of the power supply.

REMOTE: Switches from manual control to remote control (not on PSC-ETH-2 module)

## Digital User Inputs and Outputs

The PSC-ETH-2 provides eight 600V opto-isolated logic inputs with common zero for custom use.

The input impedance is 1800 Ohm, Logic high = 2.5 ... 30V, Logic low = 0V.

The PSC-ETH-2 provides also eight 600V opto-isolated, logic, open drain outputs with common zero for custom use.

The output impedance is 70 Ohm, maximum rating is 30V / 200mA.

## Software & Accessories

Example software and manual in PDF format can be downloaded from the website via [link](#).

The PSC-ETH-2 module is supplied with a Analog Programming Cable and a Line Cord.

## External Module PSC-ETH-2 EXT

### Dimensions (h x w x d)

89 x 85.5 x 118.5 mm, 0.7 kg

### Input Power

Wide range 98 - 264 VAC, 48 - 62 Hz

Power consumption 10 W

Hold-up time @ 110 VAC : 80 ms

Hold-up time @ 230 VAC : 300 ms

### Ambient temperature

Operating 0 to +55 °C

Storage -20 to +70 °C

### Isolation

Analog in- and outputs to case: 600 VDC

Logic in- and outputs to case: 600 VDC

Line input to case: 2500 VAC

### EMC

Emission : EN 61000-6-3, residential, light industrial environment

EN 55022B

Immunity : EN 61000-6-2, industrial environment

Enclosure: IP20

## Ordering Information

Models	Order Code	Description	Digital User I/O	Comments
ES150	Option P150	ES150 Series with Build-in Card	Not available	Analog programming connector removed
ES300	Option P179	ES300 Series with Build-in Card	Not available	Analog programming connector removed
SM800	Option P256	SM800 Series with Build-in Card	Available	Analog programming connector still available
SM1500	Option P177	SM1500 Series with Build-in Card	Available	Analog programming connector still available
SM6000	Option P157	SM6000 Series with Build-in Card	Available	Analog programming connector still available**

\*\*Note: Except on SM600-10 and SM300-20.