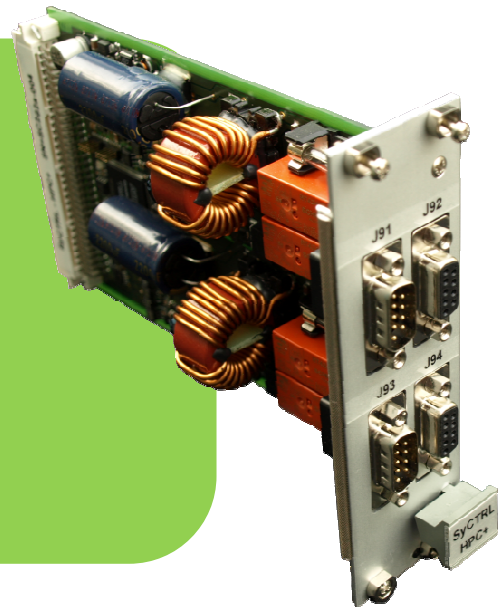


SyCTRL High Power Current Command

SyCTRL HPC+ board

- 2 high power current pulse command channels
- Configurable output current
- Configurable pulse width
- Up to 10A output current
- OVP protection for each channel
- Physical separation to Product Under Test



Overview

The HPC+ board is a 2-channel High Power current pulse command module. The power for the pulse generation comes from an external DC power supply.

With its software configurable output current and programmable over voltage protection, the HPC+ board prevents any damage on the unit under test.

The HPC+ board is mounted in any rear slot of any Chassis.

It is managed by a standard Decision board and can be mixed with one additional SyCTRL rear mounted slave board (analog IO , digital IO, LCL, RS485, HPC, ...).

Downtime optimization

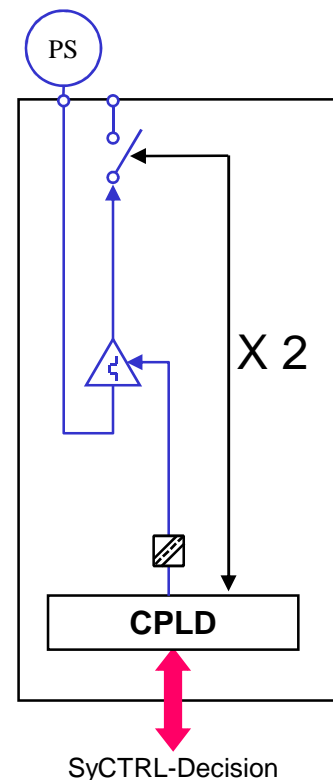
The HPC+ board embeds its own calibration parameters, reducing its downtime, in case of trouble, to the board replacement.

Safety management

The board embeds a physical separation relay that can be used for safety purpose when interfacing pyrotechnical lines or thermal knives for example.

Integrated Built-In self test

The HPC+ board embeds its own built-in self test which controls the pulse width, the current presence , the OVP and the relays health.



SyCTRL High Power Current Command

Output characteristics

Channel number	2 mono polar
Circuit type	Power NMOS in programmable resistor
Zero reference	return line at ground through 1 M Ω (bleeding resistor)
Output current	1 to 10A per channel
Maximum voltage	32 Vdc
Over voltage protection	programmable + free wheel diode
Pulse width	10ms to 1s
Pulse width programming res.	1 ms
Rise / fall time	< 500 μ s on resistive load

Power characteristics

Power consumption	5W
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Physical separation

For each line	> 10 M Ω when open
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Environmental

Operating environment

Temperature	10 to 40 $^{\circ}$ C
Humidity	40 to 90% noncondensing
Pressure	800 to 1050 mbar

Storage environment

Temperature	-10 $^{\circ}$ C to 60 $^{\circ}$ C
Humidity	up to 90% noncondensing
Pressure	800 to 1050 mbar

Mechanical

Size

sc282	3HU x 8HP x 220mm (*)
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Weight

sc282	400 g
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Connector

sc282 input	2x D-Sub 9 male
output	2x D-Sub 9 female

(*) 1 HU = 44.45 mm, 1 HP = 5.08 mm

