

SCU I6 (Code 3395)

6-channel adapter to perform current measurements with HEADlab modules and Compact Systems

Overview

The adapter SCU I6 is connected to the signal inputs of a HEADlab module, e.g. *labV6HD*, and can be used for converting measured currents (DC or AC) into corresponding voltages.

The test leads for current measurements are connected in pairs to 12 screw terminals. The measuring range of the SCU I6 is ± 5 A, the maximum current resistance 10 A.

Via BNC the signal outputs of the SCU I6 are connected to the signal inputs of a HEADlab module. The shieldings of the signal outputs are interconnected.

The SCU I6 can be power supplied either by a Controller (via HEADlink), a power adapter, or a Power Box (with built-in battery).



Features

Adapter with signal conditioning for current measurements

Connections to HEADlab modules and Compact Systems

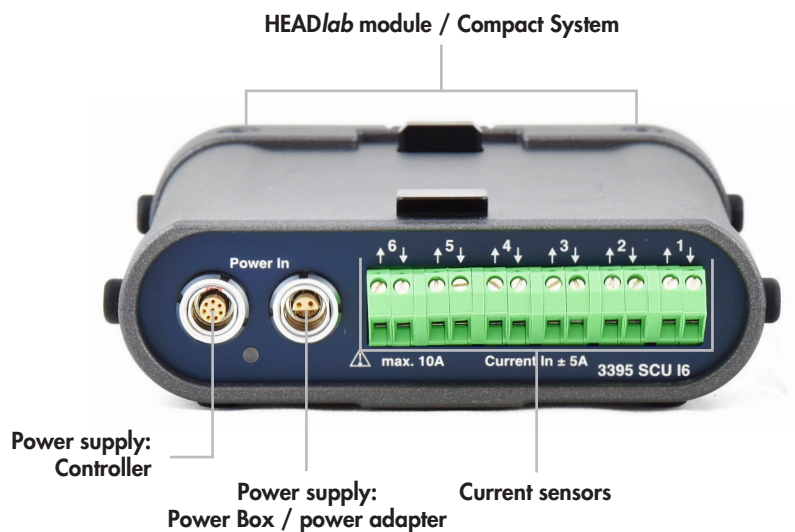
- HEADlab modules
 - *labV6HD*
 - *labV6 / labVF6*
 - *labV12 / labV12-V1 / labV12-V2* (via breakout cable)
- HEADlab Compact Systems (via breakout cable)
 - *labCOMPACT12*
 - *labCOMPACT24*

Power supply
(not included)

- Controller *labCTRL I.2* (via HEADlink)
- Power Boxes
 - *labPWR I.1*
 - *labPWR I.2*
- Power adapters
 - 24 V / 60 W / LEMO 4-pin 90 to 275 V AC, 50 to 60 Hz
 - 24 V / 150 W / LEMO 4-pin 100 to 240 V AC, 50 to 60 Hz

Functions

- Current (DC/AC) measurements
- Measuring range: ± 5 A (DC/AC)
- Converting current into a proportional voltage
- Electrically isolated measurement inputs



Scope of Supply

- SCU I6 (Code 3395)
Adapter with signal conditioning for current measurements

Technical Data

General

Input voltage range:	11 to 36 V
Power consumption:	10 W (max.)
Dimensions:	140 x 173 x 42 mm (5.5" x 6.8" x 1.7") (WxDxH)
Weight:	700 g (1.54 lb)
Power supply connector via Power Box / power adapter: via Controller (HEADlink):	LEMO 4-pin LEMO 8-pin
Operating temperature:	-10 °C to 60 °C (14 °F to 140 °F) (not condensing)
Storage temperature:	-20 °C to 70 °C (-4 °F to 158 °F)

Measurement inputs (current)

Connections:	6 x 2 screw terminals
Measuring range:	±5 A DC/AC
Max. current:	±10 A
Sensitivity:	0.5 V/A
Measuring error:	max. ±1.5 %
Max. voltage AC: DC:	max. 30 V max. 60 V

Measurement outputs (voltage)

Connections:	6 x BNC
Output voltage:	±2.5 V at ±5 A
Bandwidth:	96 kHz
Output impedance:	max. 170 Ω
Inherent noise:	max. 3 mV _{peak} @ bandwidth ≤80 kHz

Transverse section of measurement inputs (screw terminals)

Wire cross-section rigid min.:	0.2 mm ²
Wire cross-section rigid max.:	4 mm ²
Wire cross-section flexible min.:	0.2 mm ²
Wire cross-section flexible max.:	2.5 mm ²
Wire cross-section flexible with wire end ferrule without plastic sleeve min.:	0.25 mm ²
Wire cross-section flexible with wire end ferrule without plastic sleeve max.:	2.5 mm ²
Wire cross-section flexible with wire end ferrule with plastic sleeve min.:	0.25 mm ²
Wire cross-section flexible with wire end ferrule with plastic sleeve max.:	2.5 mm ²
Wire cross-section AWG (American Wire Gauge) min.:	24
Wire cross-section AWG max.:	12