

Model CS-48-100

Programmable Current Source

Features

- 48 channels—all are completely independent and floating
- Computer-controlled
- Source code available for integrating the current source functionality into test software systems
- Low noise
- Designed for semiconductor and digital superconductor circuits
- Unconditionally stable load impedance
- Greater than 1 M Ω output resistance
- Maximum circuit protection

Applications

- Current source for digital superconductor circuits
- Current source for semiconductor circuits
- Low-noise circuits
- Low-level signal instrumentation
- Automation and control for current input devices (relays, BJT)

Source Code/ Current Source Setup

Source code/device setup can be delivered using a USB stick or pre-loaded using a computer over the USB port.

Accessories Available

test leads, rack-mount brake-out panel for BNC connections



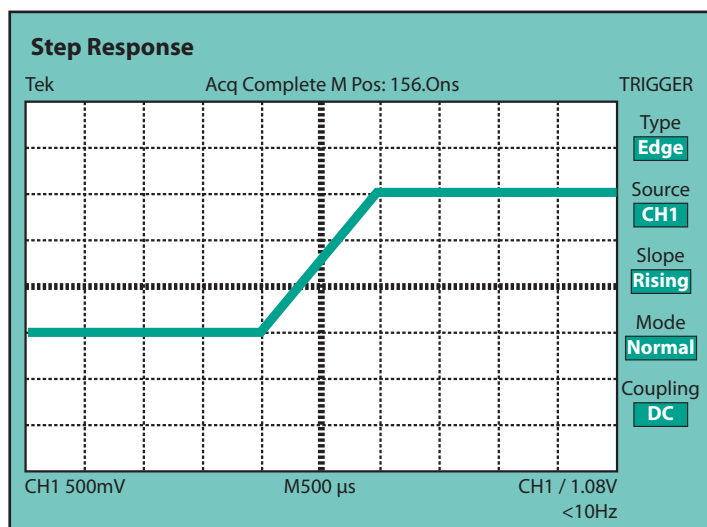
Description

The Model CS-48-100 is a multi-channel, programmable current source. Developed for both semiconductor and digital superconductor electronics, it is computer-controlled and features 48 low noise current source outputs. Each source output has the capability to both set and read back currents and can be set to a zero current high Z mute state. Each of the 48 sources are optically coupled for control and are sourced from their own secondary winding for complete galvanic isolation. The device consumes a maximum of only 80 W and handles a maximum load current of 4.8 A total over all outputs. Operating over a range of 0-100 mA on each channel, the device features accuracy of $\pm 25 \mu\text{A}$. The mute can be set through a rear panel interlock or from the front panel button for maximum circuit protection. The unit can be mounted in a standard-sized rack.

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Specifications/Performance	
Accuracy	+/-25 μ A
Programming Resolution	50 μ A (step size)
Noise	0.5 μ A
Settling Time	1 mSec
Output Current	100 mA maximum
Program Response Time	Approximately 50 μ Sec per point
Stability	Unconditionally stable
Programming Input	USB (version 1.1 or 2.0)
Output Resistance	>1 M Ω
Output Capacitance	< 400 pF
Load Impedance	Unconditionally stable
Voltage Limit (Compliance)	4.5 V
Maximum Load Current	4.8 A
DUT Resistance	40 Ω @ 100 mA
Common Mode Voltage	Floating (+/-20 V)
Floating Source	Can be used in source or sink application
Output Connections	Deutsch or DSUB 50

subject to change



Construction

19" wide, 4" high, 22" deep
(standard rack size)

20 lbs

Power supply: 100-240 V, 50-60 Hz

Power consumption: 80 W (maximum)

Output power: 19.2 W

Hardwire interlock on rear panel

RoHS compliant

Ordering information: sales@hypres.com

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