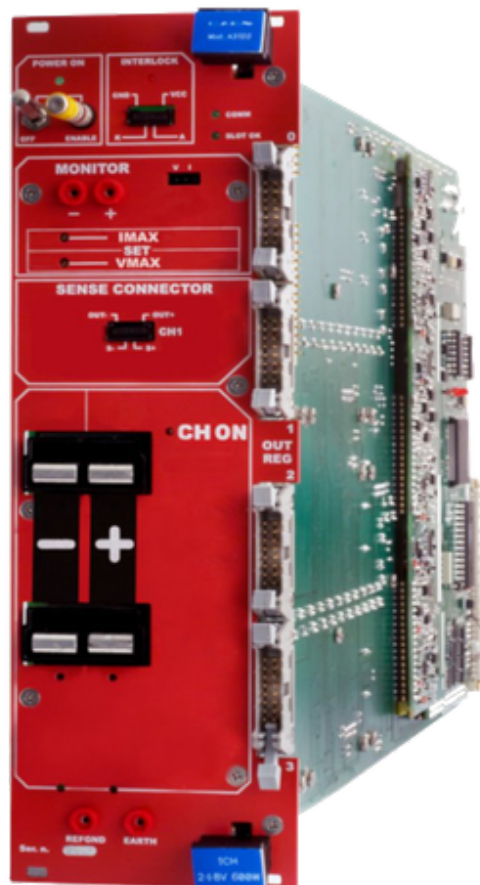
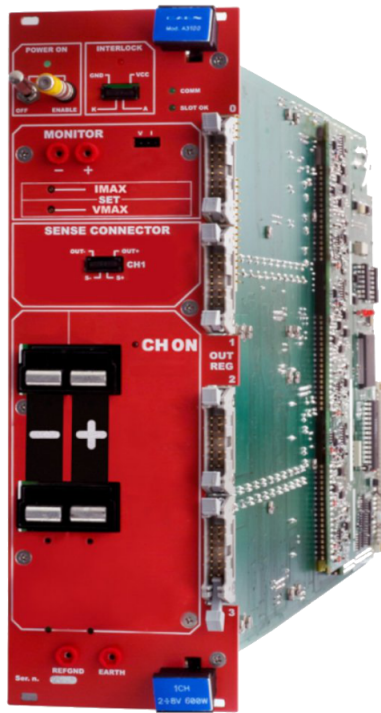


A3100

1 Channel 8 V / 100 A / 600 W Power Supply Board



Features



- EASY Subsystem Power Supply Module
- Magnetic field and radiation tolerant
- One floating $2 \div 8 \text{ V} / 100 \text{ A}$ channel
- 600 W maximum output power
- VMax and IMax set by trimmer for each channel
- On/Off for each channel
- Channels individually controlled and protected
- Line Drop Regulation on board panel
- Interlock capability
- 48 V Service local and remote on/off

Description

The CAEN **Mod.A3100** is a 8 V / 100 a Power Supply Board, developed for operation in magnetic field and moderate radioactive environment. One A3100 houses one floating (reversible polarity) 8 V / 100 A (600 W maximum output power) channel.

Two versions are available: Mod. A3100, provided with APP PC5933T output connectors, and Mod. **A3100B**, provided with screw locks for connecting the output cables.

The connector output voltage range is $1.5 \div 8$ V with 5 mV monitor resolution; channel control includes various alarms and protections.

The board is provided with Remote Sensing Lines to compensate for the voltage drop over the connection cables.

APP PC5933T connector

APP PC5933T connector for Mod.A3100

Consult our **connectors reference page** for technical information.

Safety features allows the module to perform as a current generator and includes:

Channels	can be enabled or disabled through the Global Interlock logic.
Overvoltage and Undervoltage warning	when the output voltage differs from the programmed value by more than 3% of voltage full scale range.
Overcurrent detection	When a channel attempts to exceed the programmed current limit, it signalled to be in "overcurrent" and enter in a TRIP status. The output voltage is varied to keep the current below the programmed limit for a programmable TRIP time, then the channel is switched off. If TRIP is set to "constant current mode", the channel behaves like a current generator.
Hardware VMAX and IMAX	Maximum output voltage and maximum current value can be fixed via software with 5 mV resolution and the output voltage can not be programmed beyond this value.

Technical Specifications

No. of Channels

1

Polarity

Reversible

Output Voltage

2 ÷ 8 V (connector output)

Max. Output Current

100 A

Voltage Set/Monitor Resolution

10 mV

Current Set/Monitor Resolution

100 mA

VMAX software

2 ÷ 8 V

VMAX software resolution

5 mV

Voltage Ripple

< 10 mV pp (@ full load)

Voltage Monitor vs. Output Voltage Accuracy

max. ± 50 mV $\pm 0.3\%$ of reading

Voltage Set vs. Output Voltage Accuracy

max. ± 50 mV $\pm 0.3\%$ of reading

Current Monitor vs. Output Current Accuracy

± 1 A $\pm 2\%$ of reading

Current Set vs. Output Current Accuracy

± 1 A $\pm 2\%$ of reading

Test set up

cable: length = 30 m; diam.= 8 mm (for both output and return) with sense wires connected

test load: >600 W

load capacitance: 10 μ F electrolytic // 100 nF ceramic (// to the load)

Load Regulation

$\pm 0.3 \%$ (with sense wires)
 $\pm 2 \%$ (without sense wires)

Output Power

600 W

Weight

6 kg

Ordering Options

Code	Description
WE3100XAAAAA	A3100 - EASY3000 L.V. channels 8 V/100 A/600 W floating - APP Conn. (1 ch)

Related Products

A3100HBP

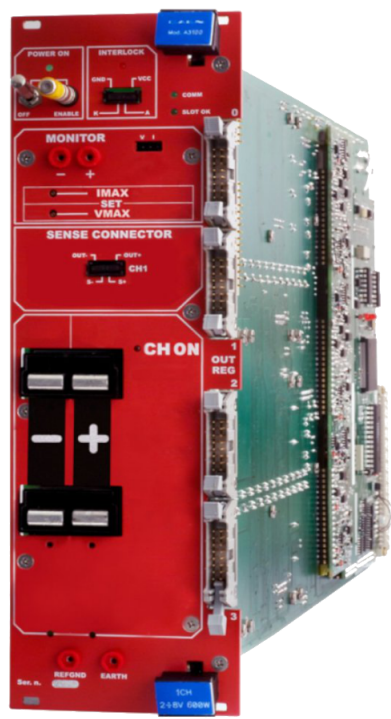


1 Channel 8-14 V / 50 A / 600 W Power Supply Board

A3100B



1 Channel 8 V / 100 A / 600 W Power Supply Board



This document, or parts thereof, may not be reproduced in any form or by any means without written permission from Caen S.p.A. Although every effort has been made to ensure the accuracy of information presented in this catalog, Caen S.p.A reserves the right to modify its products specifications without giving any notice; for up to date information please visit www.caen.it © Caen S.p.A - 2024

CAEN S.p.A.

Via Vetràia 11
55049 - Viareggio
Italy

Phone +39.0584.388.398

Fax +39.0584.388.959

info@caen.it

www.caen.it

CAEN GmbH

Brunnenweg 9
64331 Weiterstadt, Germany

Phone +49 (0)212.254.4077

Mobile +49 (0)151.16.548.484

info@caen-de.com

www.caen-de.com

CAEN Technologies, Inc.

1 Edgewater Street - Suite 101
Staten Island, NY 10305
USA

Phone +1.718.981.0401

Fax +1.718.556.9185

info@caentechnologies.com

www.caentechnologies.com

CAENspa India Private Limited

B205, BLDG42, B Wing,
Azad Nagar Sangam CHS,
Mhada Layout, Azad Nagar, Andheri West
Mumbai, Maharashtra 400053, India

info@caen-india.in

www.caen-india.in

