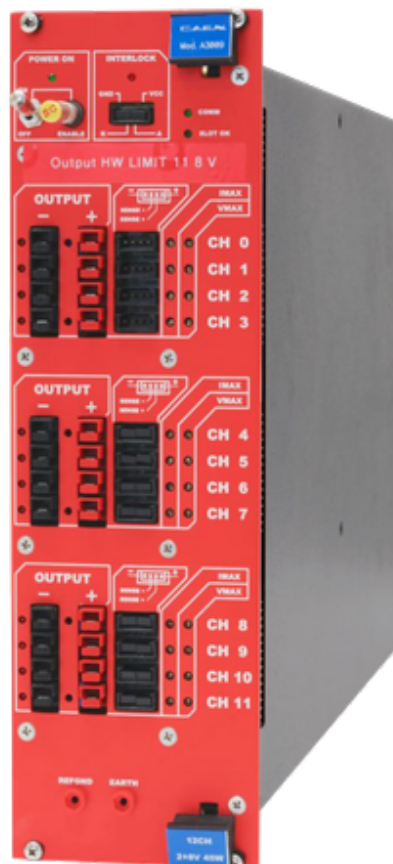
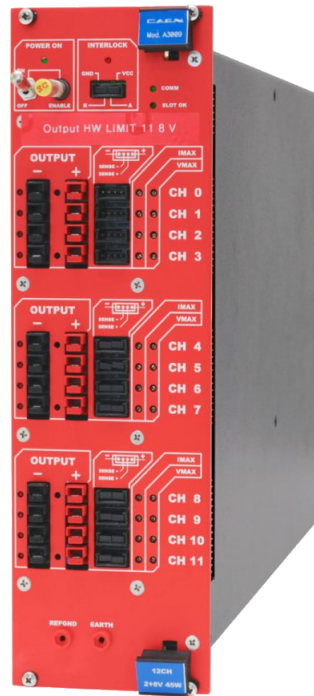


A3009

12 Channel 8 V / 9 A / 45 W Power Supply Board



Features



- EASY Subsystem Power Supply Module
- Magnetic field and radiation tolerant
- 12 floating 1.5 ÷ 8 V / 9 A channels
- 45 W maximum output power per channel
- VMax and IMax set by trimmer for each channel
- On/Off for each channel
- Channels individually controlled and protected
- Voltage Drop compensation via sense wires
- Interlock capability
- 48 V Service local and remote on/off

Description

The CAEN **Mod. A3009** 12 Channel 8 V / 9 A Power Supply Board is developed for operation in magnetic field and moderate radioactive environment. One A3009 houses 12 floating (reversible polarity) 8 V / 9 A / 45 W maximum output power channel. The connector output voltage range is 1.5 ÷ 8 V with 5 mV monitor resolution; channel control includes various alarms and protections.

APP30 connector

APP30 1317G4 type connector for Mod.A3009, A3009R

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

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

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

12

Polarity

Floating

Output Voltage

1.5 ÷ 8 V (connector output)

The board works properly with a V_{set} larger than 1.25 V and a current on the load larger than 10 A

Max. Output Current

9 A

Voltage Set/Monitor Resolution

5 mV

Current Set/Monitor Resolution

10 mA

VMAX hardware

1.5 ÷ 8 V

VMAX Hardware Accuracy

± 2% of FSR

VMAX software

1.5 ÷ 8 V

VMAX software resolution

5 m V

Voltage Ripple

< 20 mV pp on 10 μ F //0.1 μ F 10Hz-15 MHz

From 10 Hz to 15 MHz at full load; measured with the line terminated on a 10 μ F capacitance and a 100 nF ceramic capacitance in parallel to the load

Voltage Monitor vs. Output Voltage Accuracy

max. ± 30 mV $\pm 0.3\%$ of reading

Voltage Set vs. Output Voltage Accuracy

max. ± 30 mV $\pm 0.3\%$ of reading

Current Monitor vs. Output Current Accuracy

$\pm 0.05\text{A} \pm 2\%$ of reading

From 10% to 90% of Full Scale Range

Current Set vs. Output Current Accuracy

$\pm 0.05\text{A} \pm 2\%$ of reading

Load Regulation

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

From 10% to 90% of Full Scale Range

Output Power (per Channel)

45 W

Test Set Up

- Cable: length = 20~30 m; diam.= 10 mm (for both output and return) with sense wires connected
- Test load: 250÷2000 W (nominal)
- Load capacitance: 100 μF electrolytic // 100 nF ceramic (// to the load)

Weight

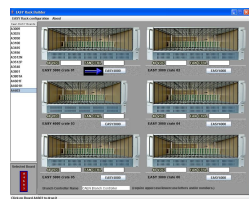
5.5 kg

Ordering Options

Code	Description
WE3009RXAAAA	A3009R - EASY3000 L.V. channels 8 V/9 A/45 W floating - Ramp Up control - APP Conn. (12 ch)
WE3009XAAAAA	A3009 - EASY3000 L.V. channels 8 V/9 A/45 Wfloating - APP Conn. (12 ch)

Related Software

EASY_XML



EASY Rack Configuration Files

Related Products

EASY3000B



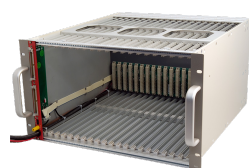
Crate for EASY3000 System for Hostile Area with Bolt Connectors

EASY3000

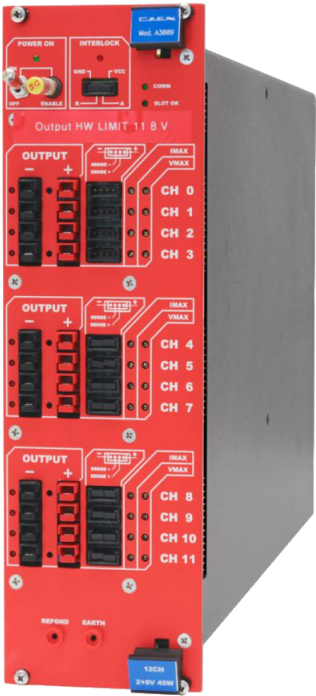


Crate for EASY3000 Power Supply System for Hostile Area

EASY3000S



Front Access Crate for EASY3000 System for Hostile Area



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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

