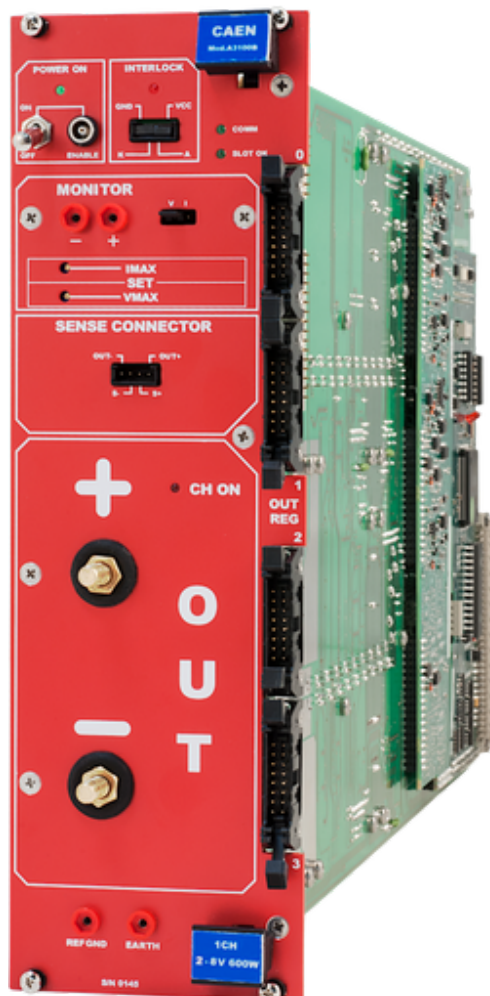
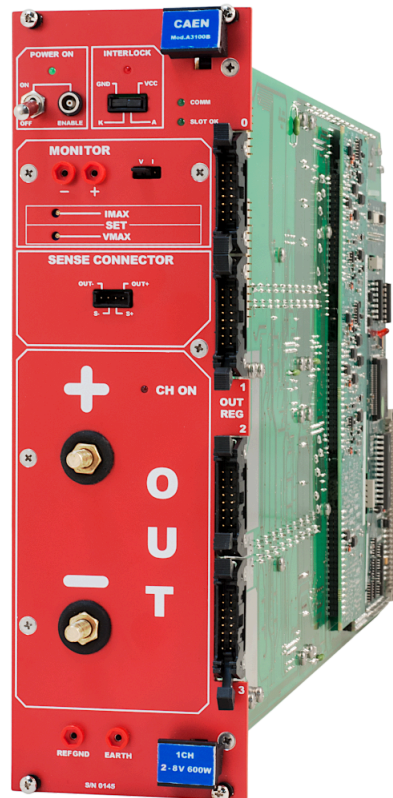


A3100B

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



Features



- EASY Subsystem Power Supply Module
- Magnetic field and radiation tolerant
- One floating $2 \div 8$ V /100 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
- Screw Lock output connectors

Description

The CAEN **Mod. A3100B** is a **8 V / 100 A Power Supply Board**, developed for operation in magnetic field and moderate radioactive environment. One A3100B houses one floating (reversible polarity) 8 V / 100 A (600 W maximum output power) channel.

The connector output voltage range is $2 \div 8$ 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. If the output voltage differs from the programmed value by more than 3% of voltage full scale range, the channel is signalled to be either in Overvoltage and Undervoltage condition.

Moreover, for each channel, a voltage protection limit SVMAX can be fixed via software with 5 mV resolution and the output voltage can not be programmed beyond this value.



Brass Hexagon head bold connector

Brass hexagon head set screw, M6x30mm connector for A3100B

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

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

Channels Overvoltage and Undervoltage warning

can be enabled or disabled through the Global Interlock logic.

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 hardware

2 ÷ 8 V

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

Load Regulation

$\pm 0.3\%$ (with sense wires) $\pm 2\%$ (without sense wires/LDR ON/SENSE OFF)

Test set up

cable: length = 30m; diam.= 8mm (for both output and return) with sense wires connected
test load: >600W
load capacitance: 10 μ F electrolytic // 100nF ceramic (// to the load)

Output Power

600 W

Weight

6.5kg

Ordering Options

Code	Description
WE3100BXAAAA	A3100B - EASY3000 L.V. channels 8 V/100 A/600 W floating - Bolt Conn. (1 ch)

Related Products

A3100

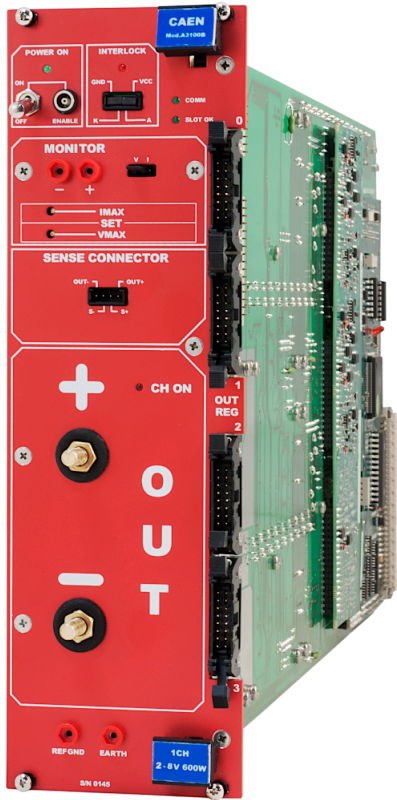


1 Channel 8 V / 100 A / 600 W Power Supply Board

A3100HBP



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



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