New

# A3100HBP

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

## Features


- EASY Subsystem Power Supply Module
- Magnetic field and radiation tolerant
- One floating 8 ÷ 14 V / 50 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. A3100HBP** is a 8 - 14 V / 50 A (600W) Power Supply Board, is developed for operation in magnetic field and moderate radioactive environment. One A3100HBP houses one positive 8 - 14 V / 50 A (600 W maximum output power) channel.
The unit is provided with screw locks for connecting the output cables. The connector output voltage range is 8 - 14 V with 10 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.

| **Brass hexagon head bolt connector** | **D-Sub16 pin connector** |
|---|---|
| Brass hexagon head bolt connector for Mod.A3100HBP | 4 x 16 pin header type connectors for Mod. A3100HBP |

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

The output current is monitored with 100 mA resolution.

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 10 mV resolution and the output voltage can not be programmed beyond this value. |

## Technical Specifications

| No. of Channels |
| --- |
| 1 |

| Polarity |
| --- |
| Positive |

| Output Voltage |
| --- |
| 8 ÷ 14V (connector output) |

| Max. Output Current |
| --- |
| 50 A |

| Voltage Set/Monitor Resolution |
| --- |
| 10 mV |

| Current Set/Monitor Resolution |
| --- |
| 100 mA |

| VMAX hardware |
| --- |
| 8 ÷ 14V |

| VMAX software |
| --- |
| 8 ÷ 14V |

| VMAX software resolution |
| --- |
| 10 mV |

| Voltage Ripple |
| --- |
| < 10 mVpp |

| Voltage Monitor vs. Output Voltage Accuracy |
| --- |
| max. ±50 mV ±0.3% of reading |

| Voltage Set vs. Output Voltage Accuracy |
| --- |
| max. ±50 mV ±0.3% of reading |

| Current Monitor vs. Output Current Accuracy |
| --- |
| ± 0.5A ± 1% of reading (typical); ± 1A ± 1% of reading (max) |

| Current Set vs. Output Current Accuracy |
| --- |
| ± 0.5A ± 1% of reading (typical); ± 1A ± 1% of reading (max) |

| Load Regulation |
| --- |
| ± 0.3 % (with sense wires)± 2 % (without sense wires/LDR ON/SENSE OFF) |

## Output Power (per Channel)

600 W

## Test Set Up

- Cable: length = 2m and 30m; diam.= 8 mm (for both output and return) with sense wires connected test load: >600W
- Load Capacitance: 10 µF electrolytic // 100 nF ceramic (// to the load)

## Weight

6.5 kg

## Ordering Options

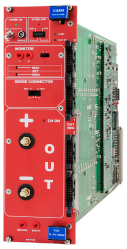
| Code | Description |
| --- | --- |
| WE3100HBPXAA | A3100HBP - EASY3000 L.V. channels 14 V/50 A/600 W - Bolt Conn. (1 ch Positive) |

## Related Products

### A3100

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

### A3100B

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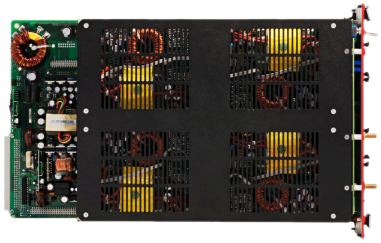
## Gallery

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