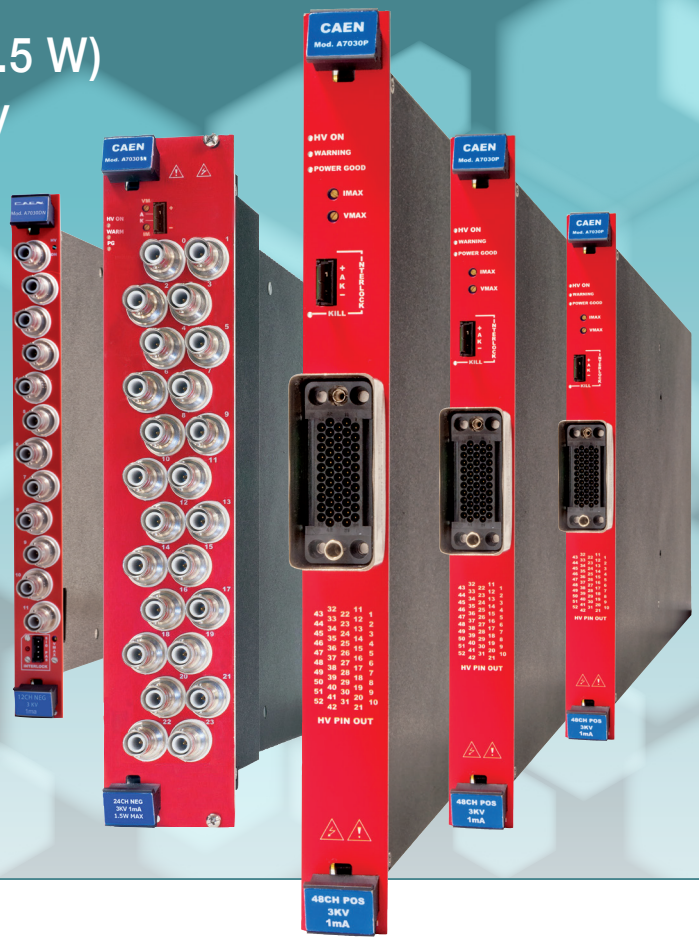
CAEN Electronic Instrumentation
Tools for Discovery

A7030 / AG7030

12/24/36/48 Channel 3 kV/1 mA (1.5 W) High Voltage Power Supply Family



Budgetary High voltage power supply? Why settle for a distributor board when you can have independent channels?

Features

- 12/24/36/48 independently controllable High Voltage channels
- 0 ÷ 3 kV output voltage
- 1 mA maximum output current (1.5 W max output power)
- 2 models available:
  - AG7030 (Common Ground)
  - A7030 (Common Floating Return)
- Radiall 52 pin or SHV coaxial connectors
- Available with positive or negative polarity
- 5 mV voltage monitor resolution
- 2 nA current monitor resolution
- Low Ripple
- Independently programmable for each channel:
  - Output voltage (50 mV resolution)
  - Current limit (20 nA resolution)
  - Ramp up/down (1÷500 Volt /sec)
  - TRIP parameter

The new line of power supply offers you all the safety, performance and control of a completely independent channel technology at the cost effective price of a distributor! You will never have to compromise!

A7030/AG7030 family house 48, 32, 24 or 12 independent high voltage channels available with either positive, negative polarity, compatible with the CAEN Universal Multichannel Power Supply Systems (SY1527, SY2527, SY3527, SY4527, SY5527).

CAEN provides 2 different models with different channel grounding: AG7030 (Common Ground) and A7030 (Common Floating Return).

AG7030 and A7030 are supplied in different versions equipped with SHV or with Radiall Multipin connector.

The output voltage range is 0 ÷ 3 kV, with 5 mV monitor resolution. The maximum output current is 1 mA (1.5 W max. output power), with 2 nA monitor resolution.

Independently programmable for each channel:

- Output voltage: 0 ÷ 3 kV step: 50 mV
- Current limit (Iset): 0 ÷ 1 mA step: 20 nA
- HV Ramp up/down: 1 ÷ 500 V/sec step: 1 V/sec
- TRIP parameter

Safety features include:

- **Channels can be enabled or disabled** through the Global Interlock logic.
- **Overvoltage and Undervoltage warning** when the output voltage differs from the programmed value.
- **Hardware VMAX and IMAX**: maximum output voltage and maximum current value can be fixed, via front panel potentiometer, at the same common value for all the board channels. IMAX and VMAX values can be read out via software.
- **Overcurrent detection**: when a channel attempts to exceed the programmed current limit (Iset), it signaled to be in "overcurrent" and enter in a TRIP status: the channel is switched off after a programmable TRIP time. The output current is permitted to exceed Iset value, the channel behaves like a current generator only if the IMAX current value is reached.
- **Safety Board Interlock**: this protection disables the HV generation when the HV outputs are not connected to their loads (only for Multipin Connector versions).

Universal Multichannel System - Mainframes

Modularity, Compatibility, Connectivity, Usability and Solidity are the keywords of the system design. The Mainframes have been specifically designed to power all detector technologies found in modern Physics Experiments, such as photomultipliers, wire chambers, streamers tubes, silicon detectors and others.

The systems are modular, flexible and match not only the requirements of major experiments with large number of channels but also the practical needs of test laboratories, where simple manual operations on a limited number of channels are often desired.

FREE DOWNLOAD

All CAEN Control Software are available for ***free download*** on the web site.

Control Software available: GECO2020 with user friendly GUI, CAEN HV Wrapper library for custom SW development and HiVoCS Web Interface. EPICS and OPC Server also supported.

EPICS | CAEN OPC Server | CAEN HV Wrapper | CAEN HiVoCS | GECO 2020

Ordering Option - Mod A7030

Code	Description
WA7030NXAAA4	A7030N - SYx527 H.V. channels -3 KV 1 mA (1.5 W) – Multipin Conn. common floating (48 ch)
WA7030PXAAA4	A7030P - SYx527 H.V. channels +3 KV 1 mA (1.5 W) – Multipin Conn. common floating (48 ch)
WA7030TNXAA3	A7030TN - SYx527 H.V. channels -3 KV 1 mA (1.5 W) – Multipin Conn. common floating (36 ch)
WA7030TPXAA3	A7030TP - SYx527 H.V. channels +3 KV 1 mA (1.5 W) – Multipin Conn. common floating (36 ch)
WA7030LNXAA2	A7030LN - SYx527 H.V. channels -3 KV 1 mA (1.5 W) – Multipin Conn. common floating (24 ch)
WA7030LPXAA2	A7030LP - SYx527 H.V. channels +3 KV 1 mA (1.5 W) – Multipin Conn. common floating (24 ch)
WA7030SNXAA2	A7030SN - SYx527 H.V. channels -3 KV 1 mA (1.5 W) – SHV Conn. common floating (24 ch 10TE wide)
WA7030SPXAA2	A7030SP - SYx527 H.V. channels +3 KV 1 mA (1.5 W) – SHV Conn. common floating (24 ch 10TE wide)
WA7030DNXAA1	A7030DN - SYx527 H.V. channels -3 KV 1 mA (1.5 W) – SHV Conn. common floating (12 ch)
WA7030DPXAA1	A7030DP - SYx527 H.V. channels +3 KV 1 mA (1.5 W) – SHV Conn. common floating (12 ch)

Ordering Option - Mod AG7030

Code	Description
WAG7030NXAA4	AG7030N - SYx527 H.V. channels -3 KV 1 mA (1.5 W) - Multipin Conn. common ground (48 ch)
WAG7030PXAA4	AG7030P - SYx527 H.V. channels +3 KV 1 mA (1.5 W) - Multipin Conn. common ground (48 ch)
WAG7030TNXA3	AG7030TN - SYx527 H.V. channels -3 KV 1 mA (1.5 W) - Multipin Conn. common ground (36 ch)
WAG7030TPXA3	AG7030TP - SYx527 H.V. channels +3 KV 1 mA (1.5 W) - Multipin Conn. common ground (36 ch)
WAG7030LNXA2	AG7030LN - SYx527 H.V. channels -3 KV 1 mA (1.5 W) - Multipin Conn. common ground (24 ch)
WAG7030LPXA2	AG7030LP - SYx527 H.V. channels +3 KV 1 mA (1.5 W) - Multipin Conn. common ground (24 ch)
WAG7030SNXA2	AG7030SN - SYx527 H.V. channels -3 KV 1 mA (1.5 W) - SHV Conn. common ground (24 ch 10TE wide)
WAG7030SPXA2	AG7030SP - SYx527 H.V. channels +3 KV 1 mA (1.5 W) - SHV Conn. common ground (24 ch 10TE wide)
WAG7030DNXA1	AG7030DN - SYx527 H.V. channels -3 KV 1 mA (1.5 W) - SHV Conn. common ground (12 ch)
WAG7030DPXA1	AG7030DP - SYx527 H.V. channels +3 KV 1 mA (1.5 W) - SHV Conn. common ground (12 ch)

News from Catalog web page
www.caen.it/news

35 years always at your side

New Products:

- A7040/AG7040 - 48 channels 100 Volt, 0.5 mA
- A7042/AG7042 - 48 channels 500 Volt, 0.5 mA

Small details
Great differences

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CAEN SpA
Via Vetraia 11
55049 - Viareggio • Italy
Phone +39.0584.388.398
Fax +39.0584.388.959
info@caen.it
www.caen.it

CAEN GmbH
Klingenstraße 108
42651 - Solingen • Germany
Phone +49.212.2544077
Fax +49.212.2544079
info@caen-de.com
www.caen-de.com

CAEN Technologies, Inc.
1140 Bay Street - Suite 2C
Staten Island, NY 10305 • USA
Phone +1.718.981.0401
Fax +1.718.556.9185
info@caentechnologies.com
www.caentechnologies.com