

## A1535 - 24 Channel 3.5 kV/3 mA Common Floating Return Board

## New



## Highlights

- Channels with common floating return
- Available with either positive or negative polarity
- 0 ÷ 3.5 kV output voltage
- 3 mA current full scale, with 500 nA resolution
- 500 mV Voltage Set/Monitor resolution
- Voltage ripple smaller than <20 mVpp
- Programmable TRIP parameter
- Current generator operation in Overcurrent condition
- Radiall 52 pin connector

## Overview

The Mod. A1535 is a single width (5 TE wide) board housing 24 HV channels, available with either positive or negative polarity. The channels share a common floating return, which allows on-detector grounding reducing the noise level. The output voltage range is  $0 \div 3.5$  kV, with 3 mA maximum output current and 0.5 V set and monitor resolution. The boards is provided with both current and voltage protections. If overcurrent occurs, the relevant channel can be programmed eihter to turn off after a programmable trip time or to keep on providing the maximum allowed current: this particular feature allows the modules to work as current generator. The maximum output voltage can be fixed, through a potentiometer located on the front panel, at the same common value for all the board channels and this value can be read out via software. Channel can be enabled or disabled through the Interlock logic.

The HV RAMP-UP and RAMP-DOWN rates may be selected independently for each channel in the  $1 \div 500$  V/s range (1 V/s step).

The Mod. A1535 board is provided with the Radiall 52 pin connector, whose mate cable connector (CAEN Mod. A996) and the relevant insertion/extraction tool (Mod. A995), are also available.

Technical Specifications Table		
Polarity	Positive / Negative depending on purchased version	
Output Voltage	0÷3.5 kV	
Max. Output Current	3 mA	
Voltage Set/Monitor Resolution	500 mV	
Current Set/Monitor Resolution	500 nA	

VMAX hardware	0÷3.5 kV common for all the board channels
VMAX hardware accuracy	± 2% of FSR
VMAX software	0÷3.5 kV settable for each channel
VMAX software resolution	1 V
Ramp Up/Down	1÷500 Volt/sec, 1 Volt/sec step
Voltage Ripple	< 20 mV pp
Voltage Monitor vs. Output Voltage Accuracy	typical: ± 0.3% ± 0.5 V max: ± 0.3% ± 2 V
Voltage Set vs. Voltage Monitor Accuracy	typical: ± 0.3% ± 0.5 V max: ± 0.3% ± 2 V
Current Monitor vs. Output Current Accuracy	typical: ± 2% ± 1 μA max: ± 2% ± 5 μA
Current Set vs. Current Monitor Accuracy	typical: ± 3% ± 1 μA max: ± 3% ± 5 μA
Maximum output power	8 W per channel (software safety limit)
Power consumption	310 W @ full power

Ordering Options		
Code	Description	
WA1535XAAAAA	A1535N - SY1527 H.V. channels -3.5 KV 3 mA common floating (24 ch)	
WA1535XPAAAA	A1535P - SY1527 H.V. channels +3.5 KV 3 mA common floating (24 ch)	
WA995XAAAAAA	A995 - Insertion/extraction tool Radiall 282549024 for A996	
WA996XAAAAAA	A996 - 52 pin cable connector for A173XB-A183XB- A1932A-A1535	