2290 High Voltage Power Supplies

**PRODUCT HIGHLIGHTS**

- Source voltages up to 5kV and 10kV
- 1μA current measurement resolution
- Low noise for precision sourcing and sensitive measurements; selectable filters reduce noise to less than 3mVRMS on the 5kV supply
- Safety interlock controls high voltage output
- GPIB programmable
- Protection module prevents damage to low voltage instrumentation

The Model 2290-PM-200 Protection Module protects low voltage measurement equipment from voltages greater than 200V.

Reverse breakdown testing of a high voltage diode using a Keithley SourceMeter® SMU instrument to measure leakage currents down to picoamp levels. The Model 2290-PM-200 SMU Protection Module protects the SourceMeter SMU instrument from high voltage when the diode breaks down.

<table>
<thead>
<tr>
<th>MODEL</th>
<th>STOCK CODE</th>
<th>MAX OUTPUT VOLTAGE</th>
<th>MAX OUTPUT CURRENT</th>
<th>POWER</th>
<th>RIPPLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>2290-5</td>
<td>NIC</td>
<td>5kV</td>
<td>5mA</td>
<td>25W</td>
<td>3mV RMS maximum with filter</td>
</tr>
<tr>
<td>2290-10</td>
<td>2401067</td>
<td>10kV</td>
<td>1mA</td>
<td>10W</td>
<td>1V RMS</td>
</tr>
</tbody>
</table>

**30-SECOND SELL**

“Perform device breakdown or high energy physics research with high voltage power supplies that can output up to 5,000V or 10,000V. These supplies have very low noise to enable accurate low current measurements. The Series 2290 high voltage power supplies measure device leakage currents down to 1μs. To measure currents even lower—down to 10pA—integrate a Keithley SourceMeter® SMU instrument into the test system, and protect it from high voltage with a Keithley safety protection module.”
RECOMMENDED ACCESSORIES

For 2290-5:
- 2290-5-SHV 5kV SHV Female–SHV Female Cable, 3m (10 ft)
- 2290-5-MHV 5kV SHV Female–MHV Male Cable, 3m (10 ft)
- 2290-5-SHBH 5kV SHV Male Bulkhead Connector
- 2290-5-RMK-1 Single Fixed Rack Mount Kit for 5kV Power Supply
- 2290-5-RMK-2 Dual Fixed Rack Mount Kit for 5kV Power Supply

For 2290-10:
- 2290-10-SHVUC 10kV SHV Male to Unterminated Cable, 3m (10ft)
- 2290-10-SHV 10kV SHV Male–SHV Male Cable, 3m (10 ft)
- 2290-10-SHBH 10kV SHV Female Bulkhead Connector
- 2290-10-RMK-1 Single Fixed Rack Mount Kit for 10kV Power Supply
- 2290-10-RMK-2 Dual Fixed Rack Mount Kit for 10kV Power Supply

For both:
- 2290-PM-200 10kV Protection Module
- 2290-INT-CABLE 3-Pin Connector to Unterminated Interlock Cable
- 4299-7 Fixed Shelf Rack Mount Kit
- KPCI-488LPA IEEE-488.2 Interface Board for the PCI Bus
- KUSB-488B IEEE-488.2 USB-GPIB Interface Adapter for USB port with built-in 2m (6.6 ft) cable
- 7007-05 Double Shielded Premium IEEE-488 Interface Cable, 0.5m (1.6 ft)
- 7007-1 Double Shielded Premium IEEE-488 Interface Cable, 1m (3.2 ft)
- 7007-2 Double Shielded Premium IEEE-488 Interface Cable, 2m (6.5 ft)
- 7007-3 Double Shielded Premium IEEE-488 Interface Cable, 3m (10 ft)
- 7007-4 Double Shielded Premium IEEE-488 Interface Cable, 4m (13 ft)

SHIPS WITH PRODUCT
- CD with User Manual, Software Drivers, and Accessory Information
- Power Cord

 ANOTHER PRODUCT FOR CONSIDERATION
If only 3000V is needed, consider the Model 2657A High Power System SourceMeter SMU Instrument, which has bipolar output and can resolve 1fA. See page 80

RECOMMENDED SERVICE
- Model Number*:
  - 3Y-EW 1-Year Factory Warranty extended to 3 years from date of shipment 000000
  - 5Y-EW 1-Year Factory Warranty extended to 5 years from date of shipment 000000
- C/Model Number*:
  - 3Y-STD KeithleyCare 3-Year Standard Calibration Plan 000000

* Insert Model Number. Examples: 2290-5-3Y-EW, C/2290E-10-3Y-STD.

TOOLS FOR THE CUSTOMER
- Data Sheet

FOR MORE INFO VISIT TEK.COM/DC-POWER-SUPPLY/SERIES-2290-HIGH-VOLTAGE-DC-POWER-SUPPLIES

3 Reasons to Buy this Product
1. Perform breakdown testing up to 10kV with a low-noise source on high voltage semiconductor devices used in the power generation, power transmission, and transportation industries.
2. Perform high energy research.
3. Protect low voltage measurement instrumentation with protection modules and protect personnel with the safety interlock in the high voltage supplies.