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Data Sheet

August 15, 2026

BERTAN ASSOCIATES

Bertan 210-05R High Voltage Power Supply 5kV

Bertan Associates DC Power Supplies. Current: ** 0 to 40mA (for the 210-05R model), Voltage: ** 115Vac.



MODEL

**Bertan Associates
210-05R**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

210-05R

LISTING

<https://aumictechlabs.com/products/210-05r-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Bertan Associates 210-05R is a high-voltage power supply module designed for precision applications. This unit is part of Spellman's Bertan 210 Series, which offers regulated high-voltage outputs ranging from 1kV to 50kV. The 210-05R model specifically provides an output of 0 to 5kV. It employs a low-noise, linear topology that results in exceptionally low output ripple specifications. The design allows for reversible output polarity, meaning it can provide either a positive or negative output. The unit is fully protected against arcing and short circuits, and it has excellent regulation and stability performance, making it suitable for demanding research, testing, and industrial control environments. Technical Specifications General * Manufacturer: Bertan Associates (a brand of Spellman High Voltage) Series: 210 Series Model: 210-05R Product Type: High Voltage Power Supply Module Power Output: 125 to 225W (for the 210 Series) Output Voltage Range: 0 to 5kV (for the 210-05R model) Output Current: 0 to 40mA (for the 210-05R model) Output Ripple: 200mV (for the 210-05R model) Topology: Low-noise, linear Polarity: Inherently reversible (positive or negative output) Protection: Fully arc and short circuit protected

Applications: Research, testing, industrial control systems, nuclear and electro-optical instrumentation, precision CRT and electron beam applications, HiPot testing, electrostatics, general laboratory usage. Electrical Specifications * Input Voltage: 115Vac, $\pm 10\%$, 50/60Hz @ 0.5A, or 230Vac, $\pm 10\%$, 50/60Hz @ 0.25A (switch selectable on rear panel) Line Regulation: $\pm 0.002\%$ of rated output voltage over specified input voltage range Load Regulation: $\pm 0.005\%$ of rated output voltage for a full load change Current Regulation: Internally set to limit at less than 125% of rated current. A rear panel switch allows limiting at 25% of rated full current. Temperature Coefficient: $\leq 100\text{ppm}/^\circ\text{C}$ Stability: $\leq 0.01\%/ \text{hour}$, $\leq 0.02\%$ per 8 hours after a 1/2 hour warm-up period. Accuracy: * Front Panel Control: $\pm(0.2\% \text{ of setting} + 0.2\% \text{ of maximum})$ * Front Panel Meter (Voltage): $\pm(0.5\% \text{ of setting} + 0.5\% \text{ of maximum})$ * Front Panel Meter (Current): $\pm(2\% \text{ of setting} + 0.5\% \text{ of maximum})$ * Remote Programming: $\pm(0.1\% \text{ of setting} + 0.1\% \text{ of maximum})$ * Voltage Monitor: $\pm(0.1\% \text{ of reading} + 0.1\% \text{ of maximum})$ * Current Monitor: $\pm(2\% \text{ of reading} + 1\% \text{ of maximum})$ Interfaces * Remote Programming: Via rear panel input (voltage or resistance programming) Interface Connector: Details available in manufacturer documentation. (e.g., for 230 Series, Voltage Monitor, N/C, Enable, + and Voltage/Current programming, Current Monitor are listed). The 210 Series manual details specific pin functions. Enable/Disable: TTL "0" disables HV, TTL "1" or open enables HV. Physical Specifications * Mounting: Designed to mount in a standard 19" rack. Enclosure: Fully enclosed unit. Dimensions: Specified in manufacturer's Table 1.1; chassis depth behind front panel is listed separately from overall dimensions. Compliance and Certifications * EMC Directive: Compliant to 2004/108/EC Low Voltage Directive: Compliant to 2006/95/EC Quality Standards: Spellman High Voltage is an ISO 9001:2008 and ISO 14001:2004 registered company. Why Choose Aumictech for Bertan Associates 210-05R? At Aumictech, we specialize in supplying high-end high-voltage power supply equipment. Whether you need precise voltage control, exceptionally low ripple, or solid stability for your critical operations, our team ensures the Bertan Associates 210-05R delivers maximum performance for your application.

21005R Characteristics / Specifications

PARAMETER	VALUE
Model	210-05R
Instrument Type	reversible linear high voltage power supply
Family	Bertan / Spellman 210 Series 125 to 225 W
Output Voltage	0 to 5 kV
Output Current	0 to 40 mA
Ripple	200 mV
Input 115 V	115 VAC plus or minus 10 percent, 50/60 Hz at 5 A
Input 230 V	230 VAC plus or minus 10 percent, 50/60 Hz at 2.5 A
Line Regulation	less than or equal to 0.001 percent of rated output over specified input
Load Regulation	less than or equal to 0.005 percent of rated output for a full load change
Current Limit	105 percent of rated current at full voltage; derate linearly to 30 percent at zero voltage
Temperature Coefficient	less than or equal to 50 ppm per °C Stability Hour: less than or equal to 0.01 percent per hour after 30 min warm-up
Stability Eight Hour	0.02 percent per 8 hours after 30 min warm-up
Voltage Monitor Accuracy	plus or minus (0.25 percent of reading plus 0.25 percent of maximum)
Current Monitor Accuracy	plus or minus (0.5 percent of reading plus 0.25 percent of maximum)
Remote Program Accuracy	plus or minus (0.25 percent of setting plus 0.05 percent of maximum) for 1 kV to 30 kV
Front Panel Meter	plus or minus 2 percent of full scale
Operating Temperature	0 °C to plus 50 °C
Storage Temperature	minus 40 °C to plus 85 °C
Humidity	20 to 85 percent RH non-condensing
Dimensions 1 To 5 Kv	19.0 x 5.25 x 11.0 in (483 x 133 x 279 mm)
Mass To 30 Kv	less than or equal to 40 lb (18.1 kg)
Interface Connector	7-pin Amphenol 126-198
Program Input	0 to minus 5 VDC equals 0 to 100 percent rated voltage

PARAMETER	VALUE
Manufacturer	Bertan Associates / Spellman High Voltage

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Storage temperature	minus 40 C to plus 85 C
Operating temperature	0 C to plus 50 C
Operating Temperature	0 C to plus 50 C
Humidity	20 to 85 percent RH non-condensing
Dimensions 1 To 5 Kv	19.0 x 5.25 x 11.0 in (483 x 133 x 279 mm)
Mass To 30 Kv	less than or equal to 40 lb (18.1 kg)
Interface Connector	7-pin Amphenol 126-198
Program Input	0 to minus 5 VDC equals 0 to 100 percent rated voltage
Manufacturer	Bertan Associates / Spellman High Voltage Notes From Spellman/Bertan 210 Series datasheet 128050-001 Rev. J model- selection table. 210-05R row is 0 to 5 kV, 0 to 40 mA, 200 mV ripple. Confirm polarity switch setting and 115 versus 230 VAC jumper/switch.

Full OEM specifications

Complete technical content extracted from the manufacturer datasheet. Sparse OEM tables are reconstructed as tables below; other text is preserved as paragraphs.

Specifications	
Technical Specifications	
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Output Voltage	0 to 5 kV
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Ripple	200 mV
Input 115 V	115 VAC plus or minus 10 percent, 50/60 Hz at 5 A
Input 230 V	230 VAC plus or minus 10 percent, 50/60 Hz at 2.5 A
Line Regulation	less than or equal to 0.001 percent of rated output over specified input
Load Regulation	less than or equal to 0.005 percent of rated output for a full load change
Current Limit	105 percent of rated current at full voltage; derate linearly to 30 percent at zero voltage
Temperature Coefficient	less than or equal to 50 ppm per C
Stability Hour	less than or equal to 0.01 percent per hour after 30 min warm-up
Stability Eight Hour	0.02 percent per 8 hours after 30 min warm-up
Voltage Monitor Accuracy	plus or minus (0.25 percent of reading plus 0.25 percent of maximum)
Current Monitor Accuracy	plus or minus (0.5 percent of reading plus 0.25 percent of maximum)
Remote Program Accuracy	plus or minus (0.25 percent of setting plus 0.05 percent of maximum) for 1 kV to 30 kV
Front Panel Meter	plus or minus 2 percent of full scale
Operating Temperature	0 C to plus 50 C
Storage Temperature	minus 40 C to plus 85 C
Humidity	20 to 85 percent RH non-condensing
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Line Regulation	less than or equal to 0.001 percent of rated output over specified input
Load Regulation	less than or equal to 0.005 percent of rated output for a full load change
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Stability Eight Hour	0.02 percent per 8 hours after 30 min warm-up
Voltage Monitor Accuracy	plus or minus (0.25 percent of reading plus 0.25 percent of maximum)
Current Monitor Accuracy	plus or minus (0.5 percent of reading plus 0.25 percent of maximum)
Remote Program Accuracy	plus or minus (0.25 percent of setting plus 0.05 percent of maximum) for 1 kV to 30 kV
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Notes

From Spellman/Bertan 210 Series datasheet 128050-001 Rev. J model-selection table. 210-05R row is 0 to 5 kV, 0 to 40 mA, 200 mV ripple. Confirm polarity switch setting and 115 versus 230 VAC jumper/switch.

Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

Request a quote: sales@aumictech.com · +1 (484) 841-9341

Aumictech

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NIST-traceable calibration · SAM registered ·
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Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.