

**Aumictech**

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Data Sheet

August 15, 2026

BERTAN ASSOCIATES

Bertan 205B-03R High Voltage Power Supply 3kV

The Bertan Associates 205B-03R is a high-voltage DC power supply module designed for precision applications demanding stable and low-noise output. This unit is part of the 205B series, which offers regulated high voltage outputs ranging from 1kV to 50kV, with the 205B-03R model specifically providing an output of 0 to 3kV. It is built with a low-noise, linear topology to ensure minimal output ripple. The module is capable of both positive and negative output polarities, is fully protected against arcs and short circuits, and features excellent regulation and stability. At Aumictech, we specialize in supplying high-end power supply equipment. Whether you need precision voltage control, low-noise operation, or solid protection features, our team ensures the Bertan Associates 205B-03R delivers maximum performance for your application. Aumictech offers NIST-traceable calibration and repair



MODEL

**Bertan Associates
205B-03R**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

205B-03R

LISTING

<https://aumictechlabs.com/products/205b-03r-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Bertan Associates 205B-03R is a high-voltage DC power supply module designed for precision applications demanding stable and low-noise output. This unit is part of the 205B series, which offers regulated high voltage outputs ranging from 1kV to 50kV, with the 205B-03R model specifically providing an output of 0 to 3kV. It is built with a low-noise, linear topology to ensure minimal output ripple. The module is capable of both positive and negative output polarities, is

fully protected against arcs and short circuits, and features excellent regulation and stability.

Technical Specifications Model: Bertan Associates 205B-03R Output Voltage: Range: 0 to 3kV DC Regulation: $\leq 0.005\%$ for a full load change; $\pm 0.001\%$ for $\pm 10\%$ input line change Accuracy (Remote Programming): $\pm (0.1\% \text{ of setting} + 0.1\% \text{ of maximum})$ Accuracy (Front Panel Control): $\pm (0.25\% \text{ of setting} + 0.05\% \text{ of maximum})$ Monitor Accuracy (Voltage): $\pm (0.1\% \text{ of reading} + 0.1\% \text{ of maximum})$ Output Current: Range: 0 to 10mA DC Regulation: Internally set to limit at 105% of rated current at full output voltage. Maximum output current must be derated linearly to 30% of maximum at zero output voltage. Monitor Accuracy (Current): $\pm (0.5\% \text{ of reading} + 0.25\% \text{ of maximum})$ Power: Total Output Power: 30W Ripple & Noise: Ripple: 30mV (peak-to-peak) Stability: Short-term (1 hour after 1/2 hour warm-up): $\leq 0.01\%$ Long-term (8 hours after 1/2 hour warm-up): $\leq 0.02\%$ Temperature Coefficient: $\leq 50\text{ppm}/^\circ\text{C}$ Input Power: Voltage: 115VAC / 230VAC, $\pm 10\%$, 50-400Hz, single phase Current (115VAC): 1A Current (230VAC): 0.5A Interfaces: Control: * Local Control: Via front panel controls * Remote Analog Control: Via external voltage source or potentiometer (0 to +5V signal) Monitoring: * Analog Output Voltage Monitor: 0 to +5V proportional to output voltage * Analog Output Current Monitor: 0 to +5V proportional to output current Logic: * Logic ENABLE Input: TTL compatible, enables high voltage generation * Logic Output Signal: Indicates high voltage polarity High Voltage Connector: Bertan P/N JDK output connector, Bertan P/N PDB mating connector (MHV Type UG-932/U) included Physical: Dimensions (up to 20kV models): 19" W x 3.5" H x 9.625" D (483 x 89 x 244mm) Weight (up to 20kV models): 20 lbs (9.1 kg) Mounting: Designed for standard 19" rack mounting Encapsulation: High voltage assembly is fully encapsulated in silicone rubber Environmental: Operating Temperature: 0°C to $+50^\circ\text{C}$ Storage Temperature: Not specified. Protection Features: Arc Protected Short Circuit Protected Regulatory Compliance: Compliant to 2004/108/EC (EMC Directive) and 2006/95/EC (Low Voltage Directive) CE standards, with conditions of acceptance often including customer-provided enclosure mounting, EMC filtering, and appropriate protection and isolation devices Why Choose Aumictech for Bertan Associates 205B-03R? At Aumictech, we specialize in supplying high-end power supply equipment. Whether you need precision voltage control, low-noise operation, or solid protection features, our team ensures the Bertan Associates 205B-03R delivers maximum performance for your application.

205B03R Characteristics / Specifications

PARAMETER	VALUE
Model	205B-03R
Instrument Type	Regulated high voltage DC power supply
Output Voltage	0 to 3 kV
Output Current	0 to 10 mA
Ripple	30 mV
Output Polarity	reversible by design
Input Voltage	115 Vac ± 10 % 50/60 Hz at 1 A or 230 Vac ± 10 % 50/60 Hz at 0.5 A, switch selectable
Line Regulation	≤ 50 ppm / 0.001 % of rated output voltage over specified input range
Load Regulation	≤ 0.005 % of rated output voltage for a full load change
Current Limit	internally 105 % of rated current at full output voltage; derate linearly to 30 % at zero voltage
Temperature Coefficient	≤ 50 ppm/ $^{\circ}\text{C}$
Stability	≤ 0.01 %/hour, 0.02 % per 8 hours after 1/2 hour warm up
Voltage Monitor Accuracy	$\pm (0.1$ % of reading + 0.1 % of maximum)
Current Monitor Accuracy	$\pm (0.5$ % of reading + 0.25 % of maximum)
Remote Programming Accuracy	$\pm (0.1$ % of setting + 0.1 % of maximum)
Front Panel Voltage Meter	$\pm (0.1$ % of setting + 0.1 % of maximum)
Monitor Scale	0 to 5 Vdc = 0 to 100 % rated, Z_{out} 10 k Ω
Program Input	0 to 5 Vdc = 0 to 100 % rated, Z_{in} 1 M Ω
Operating Temperature	0 $^{\circ}\text{C}$ to +50 $^{\circ}\text{C}$
Storage Temperature	-40 $^{\circ}\text{C}$ to +85 $^{\circ}\text{C}$
Humidity	20 % to 85 % RH non-condensing
Dimensions	19.0 in W $\times$ 3.5 in H $\times$ 9.625 in D (483 mm $\times$ 89 mm $\times$ 244 mm) for 1 to 20 kV units
Weight	≤ 20 lb (9.1 kg) through 20 kV units
Hv Cable	detachable 10 foot (3 m)

PARAMETER	VALUE
Interface	9 pinDconnector
Manufacturer	Bertan Spellman
Literature	Spellman Bertan 205B series data sheet 128046-001 REVNFamily: Bertan 205B 1 to 50 kV supplies
Brand Lineage	Bertan Spellman
Form Factor	2U 19 inch rack HV supply
System Role	3 kV 10 mA laboratory HV source
Cooling	convection
Enable	TTL 0 disables HV, TTL 1 or open enables HV

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Storage temperature	40 °C to +85 °C
Operating temperature	0 °C to +50 °C
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Humidity	20 % to 85 % RH non-condensing
Dimensions	19.0 in W × 3.5 in H × 9.625 in D (483 mm × 89 mm × 244 mm) for 1 to 20 kV units
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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	
PARAMETER	VALUE
Model	205B-03R
Instrument Type	Regulated high voltage DC power supply
Output Voltage	0 to 3 kV
Output Current	0 to 10 mA
Ripple	30 mV
Output Polarity	reversible by design
Input Voltage	115 Vac $\pm 10\%$ 50/60 Hz at 1 A or 230 Vac $\pm 10\%$ 50/60 Hz at 0.5 A, switch selectable
Line Regulation	≤ 50 ppm / 0.001% of rated output voltage over specified input range
Load Regulation	$\leq 0.005\%$ of rated output voltage for a full load change
Current Limit	internally 105% of rated current at full output voltage; derate linearly to 30% at zero voltage
Temperature Coefficient	≤ 50 ppm/ $^{\circ}\text{C}$
Stability	$\leq 0.01\%$ /hour, 0.02% per 8 hours after 1/2 hour warm up
Voltage Monitor Accuracy	$\pm(0.1\%$ of reading + 0.1% of maximum)
Current Monitor Accuracy	$\pm(0.5\%$ of reading + 0.25% of maximum)
Remote Programming Accuracy	$\pm(0.1\%$ of setting + 0.1% of maximum)
Front Panel Voltage Meter	$\pm(0.1\%$ of setting + 0.1% of maximum)
Monitor Scale	0 to 5 Vdc = 0 to 100% rated, Z_{out} $10\text{ k}\Omega$
Program Input	0 to 5 Vdc = 0 to 100% rated, Z_{in} $1\text{ M}\Omega$
Operating Temperature	$0\text{ }^{\circ}\text{C}$ to $+50\text{ }^{\circ}\text{C}$
Storage Temperature	$-40\text{ }^{\circ}\text{C}$ to $+85\text{ }^{\circ}\text{C}$
Humidity	20% to 85% RH non-condensing
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Weight	≤ 20 lb (9.1 kg) through 20 kV units
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PARAMETER	VALUE
Interface	9 pin D connector
Manufacturer	Bertan Spellman
Literature	Spellman Bertan 205B series data sheet 128046-001 REV N
Family	Bertan 205B 1 to 50 kV supplies
Brand Lineage	Bertan Spellman
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Enable	TTL 0 disables HV, TTL 1 or open enables HV

Notes

From Spellman Bertan 205B data sheet 128046-001 (205B-03R 0–3 kV / 0–10 mA / 30 mV ripple; 115/230 Vac; 19.0×3.5×9.625 in). Isolated floating RF catalog and 9-pinDpinout are on page 2 of that sheet.

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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Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.