

**Proven  
Reliability**

# CB SERIES

## MINIATURE, REGULATED HIGH VOLTAGE DC TO DC CONVERTERS

100V to 10kV at 1 Watt



### PRODUCT SELECTION TABLE

| MODEL  | OUTPUT VOLTAGE | OUTPUT CURRENT*1 | RIPPLE |
|--------|----------------|------------------|--------|
| CB101  | 0 to +10kV     | 0 to 100 $\mu$ A | <0.1%  |
| CB101N | 0 to -10kV     | 0 to 100 $\mu$ A | <0.1%  |

### PRODUCT DESCRIPTION

The CB Series is new line of miniature, well regulated high voltage power supplies providing clean and reliable high voltage in a shielded, PC-mount package. Offering precision 0 to 100% programmability and very low ripple and EMI/ RFI, these cost-effective power supplies are ideal for integration into compact, sensitive equipment. The CB Series features current and voltage monitoring, built-in protection against programming overvoltage, and thermal shutdown. These modules come in a positive or negative output voltage of 10kV. For voltages ranging from 100V to 8kV, see the C series.

### FEATURES

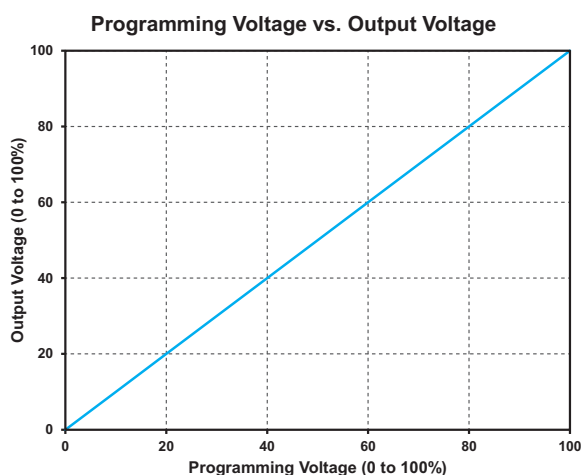
- Regulated
- Low Noise, Quasi-Sinewave Oscillator
- Miniature Size
- 0 to 100% Programmable Output
- High Stability
- Wide Input Voltage Range, 11.5 to 16V
- Very Low EMI/RFI
- High Reliability: MTBF >2.6 Million Hours per Bellcore TR-332
- Plated Steel Case with Isolated Case Ground
- Sealed to Withstand Immersion Cleaning Process
- External Gain Adjust for Calibration
- Built-in Programming Voltage Overvoltage Protection
- Built-in 5V Reference Voltage
- Built-in Thermal Shutdown
- Voltage Monitor: 0 – 5V = 0 – 100% Vout
- Current Monitor: 0 – 5V = 0 – 100% Iout
- UL Certified Encapsulant, Meets 94V-0 Flammability
- RoHS Compliant

### OPTIONS

- Extended Operating Temperature - Consult Factory

### APPLICATIONS

- Electrophoresis
- Capacitor Charging
- Field Generation
- Spectrometry
- Deflection Plates
- Test Instrumentation
- Image Intensifier



ISO 9001:2008  
CERTIFIED

ISO 14001:2004  
CERTIFIED

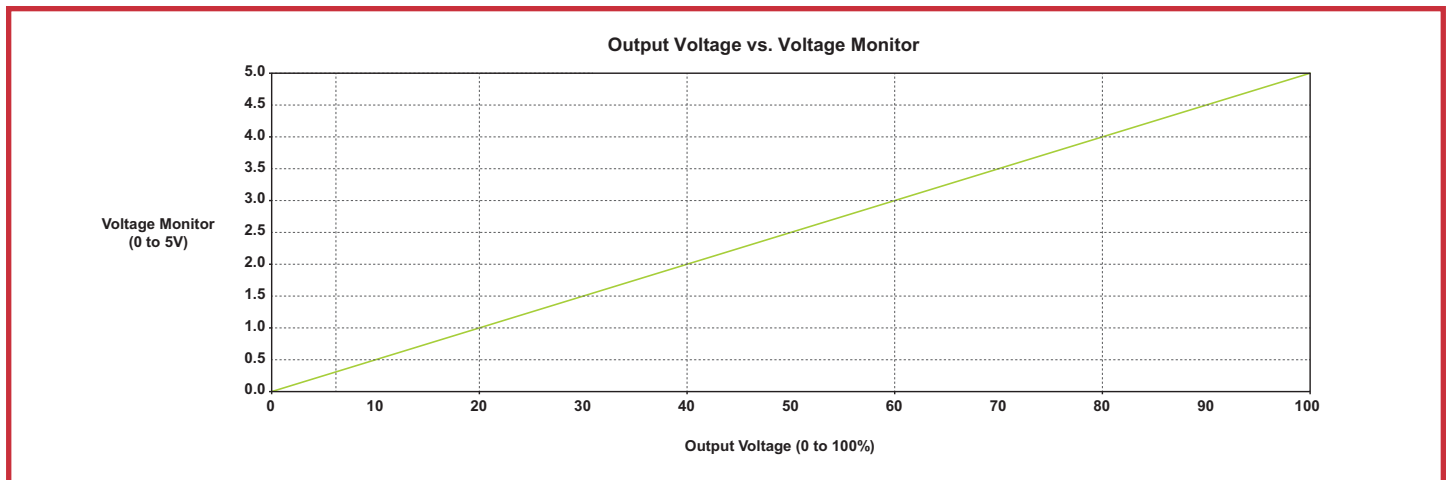
RoHS  
COMPLIANT

IPC  
Certified J-STD-001  
Application Specialist

ELECTRICAL SPECIFICATIONS\*2 CB101 (10,000V)

| OUTPUT VOLTAGE | MODEL  | OUTPUT CURRENT*1 | RIPPLE P-P FULL-LOAD*3 | REGULATION       |                      | FREQUENCY*3  |
|----------------|--------|------------------|------------------------|------------------|----------------------|--------------|
|                |        |                  |                        | LOAD 0 TO 100%*3 | LINE 11.5 TO 16.0V*3 |              |
| 0 to +10kV     | CB101  | 0 to 100 $\mu$ A | <0.1%                  | <0.1%            | <0.1%                | 100 - 150kHz |
| 0 to -10kV     | CB101N | 0 to 100 $\mu$ A | <0.1%                  | <0.1%            | <0.1%                | 100 - 150kHz |

OUTPUT VOLTAGE VS VOLTAGE MONITOR



OUTPUT CURRENT VS CURRENT MONITOR

