

**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

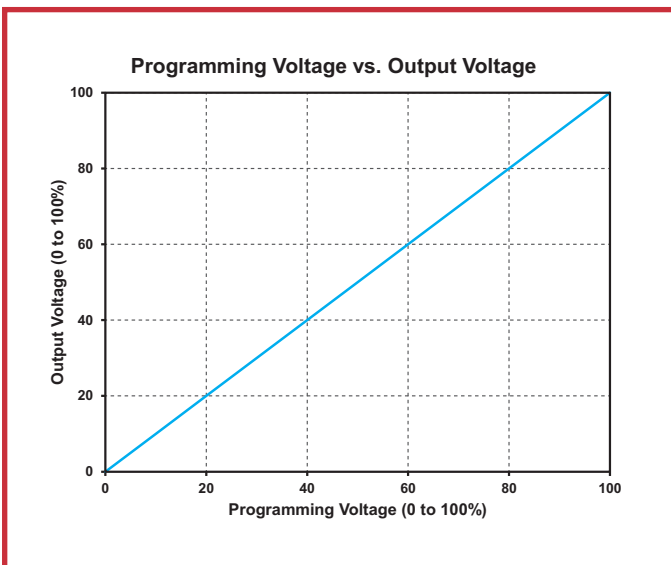
- Regulated
- Low Noise, Quasi-Sinewave Oscillator
- Miniature Size
- 0 to 100% Programmable Output
- High Stability
- Wide Input Voltage Range, 11.5 to 16V
- Very Low EMI/RFI
- High Reliability: MTBF >2.6 Million Hours per Bellcore TR-332
- Plated Steel Case with Isolated Case Ground
- Sealed to Withstand 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

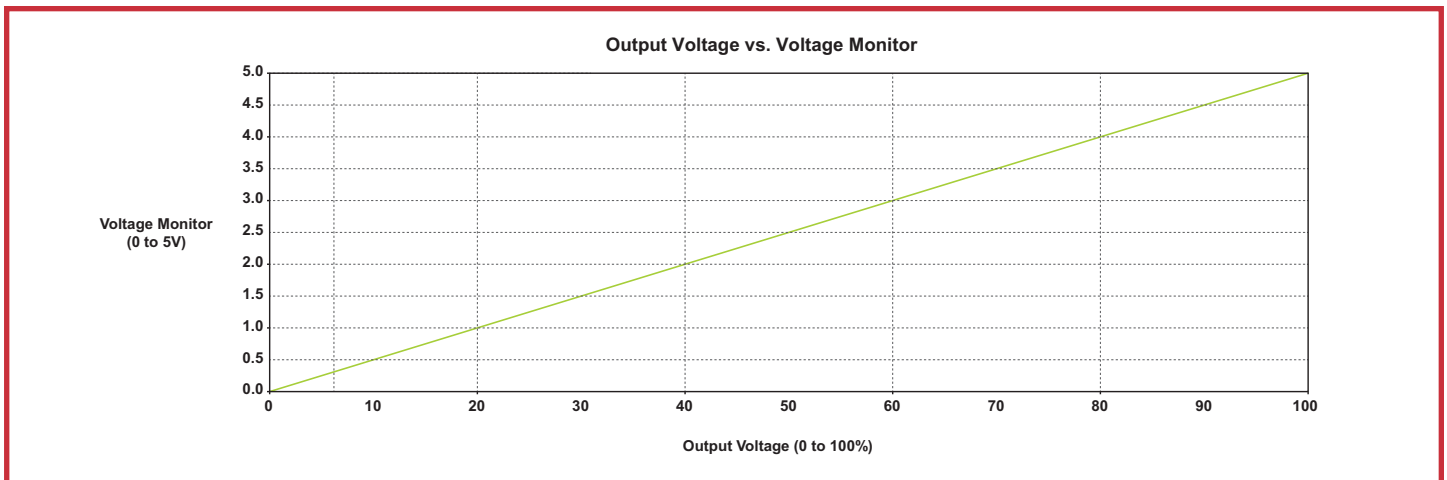
RoHS  
COMPLIANT

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

