SPICER SC22

DESCRIPTION

The SC22 is a low-cost, high-performing AC magnetic field cancellation system that reduces the ambient AC field and restores the resolution and accuracy.

KEY FEATURES

- Cancels AC fields from 10 Hz to 5 kHz
- 50 x field improvement at 60Hz
- Supports dual sensors for TEMs and high-gradient fields
- \bullet Adapts to field changes within 100 μs
- Intelligent user interface with automatic setup and real-time monitoring
- Green "Field OK" Indicator Light

SPECIFICATIONS

Field Cancelling		
Components Cancelled	X, Y, Z fields	
Dynamic Range (X & Y)*1	60 mG (6 µT) Pk-Pk	
Dynamic Range (Z)*1	30 mG (3 µT) Pk-Pk	
Field Cancelling Factor	50 X at 50/60 Hz	
Bandwidth	2.5 Hz – 5,000 Hz	
Cancelling Noise Limit (0.5 to 5,000Hz)	0.7nT RMS total	
Power	120/240 V (+10% -20%) 50/60 Hz , 50 VA	
1* Dynamic range is stated when operating at the nominal AC power input of 120 or 240 volts RMS. De-rate linearly for lower voltages.		

SPICER CONSULTING SC22 FIELD CANCELLING SYSTEM Total Field 0.018 mg 0.010 0.013 UNITS SETUP (* 0.007 0 0 0 SC22 Controller PICER CONSULTI SC24/AC Sensor **CANCELLING FACTOR** 1000 r cancelling facto Cancelling Factor (numeric) 100 10 0.1 01 10 100 1000 10000 Frequency (Hz) SC24/AC Sensor provides excellent cancellation of 60 Hz and its harmonics.

SPICER CONSULTING

1441 Rollins Road Burlingame, CA 94010 www.vibeng.com



Spicer-SC22-data-sheet

SPICER SC22

INSTALLATION EXAMPLES



DUAL LOOP INSTALLATION		
Ideal For	Transmission Electron Microscopes (TEMs)	
Benefit	Uniform cancellation along the entire electron beam column	
Performance	Reduce fields from 10 to 12 mG to 0.05 mG from 1.3m – 4.5m	

SINGLE LOOP INSTALLATION

Ideal For	Scanning Electron Microscopes (SEMs) and Dual Beams that are in a single room with one microscope centered in the room	
Benefit	Cables are on the wall, out of the way, and don't inhibit access and serviceability of the microscope	
Performance	Reduce fields from 20 mG to 0.1 mG	*



FRAME INSTALLATION Ideal For Standard SEMs and Dual Beams with multiple instruments in the same room or when microscope is in a very large room away from walls Benefit Helmholtz loop configuration provides excellent performance and field uniformity while minimizing interference on adjacent instruments Performance Reduce fields from 20 mG to 0.1 mG

ENCLOSURE INSTALLATION Ideal For SEMs, Dual Beams, & TEMs with enclosures Benefit Cables integrated into system enclosure, and
VEC can provide layouts to accomodate cranes
and other accessories Performance Reduce fields from 20 mG to 0.1 mG



Hybrid configurations and advanced double dual loop system design also available.



For more information about the Spicer SC22, scan this QR code





1441 Rollins Road Burlingame, CA 94010 www.vibeng.com