

## Specifications

### Electronics

Box:	Steel construction, with internal battery compartment		
	Size (W×H×D): $6 \times 2.6 \times 7.5$ (in) $(153 \times 66 \times 190 \text{ (mm)})$		
	Weight: 2.65 lb (1200 g)		
Power:	$\pm$ 9 VDC, 48 mA supplied by two 9 V alkaline transistor batteries		
Outputs:	X (current): 1 V corresponds to 100	μA through SQUID or mod. coil	
	Y (voltage): 1 V corresponds to 100	1 V corresponds to 100 $\mu$ V across SQUID	
Sweep:	Oscilloscope (high speed) setting:	15 Hz	
	X-Y recorder (low-speed) setting:	0.07 Hz	
Amplifier:	Voltage gain:	×10,000	
	Frequency response:	0 to 2.8 kHz	
	Voltage noise floor:	$< 1.8 \text{ nV}/\sqrt{\text{Hz}} \text{ for } f > 10 \text{ Hz}$	
	Total output noise voltage:	<1 mV	

### Probe

Length:	18.5 in (470 mm)
Diameter:	0.25 in (6.35 mm)
Connector:	DB-9 receptacle
SQUID type:	Bicrystal grain-boundary Josephson junction dc SQUID
SQUID dimensions:	90 $\mu$ m × 90 $\mu$ m OD, 20 $\mu$ m × 20 $\mu$ m ID
SQUID inductance:	Nom. 60 pH
Two modulation coils, mutual inductance to SQUID:	Nom. 37 pH
SQUID critical current:	>5 µA
Voltage swing:	$>10 \mu V$
SQUID flux noise:	Nom. <10 $\mu \Phi_0 / \sqrt{\text{Hz}}$
SQUID field sensitivity	$0.71 \ \mu T/\Phi_0$

### **Magnetic Shield**

Co-netic alloy tube, 0.625 in (15.9 mm) diameter, 3.5 in (88.9 mm) long Black baked enamel finish, textured outside, smooth inside 7500 Gauss saturation induction Initial permeability 30,000 at 295 K, approx. 4,500 at 77 K Equivalent to Magnetic Shield Corp. P/N 06P35



# **Specifications (continued)**

### **RF Filter Module**

DB-9 M/F EMI filtered connector adapter Each line contains a 0.8 MHz, 4,000 pF low-pass pi-filter Equivalent to Spectrum Control, Inc. P/N SCI-56-705-005-LI

### Cable

DB-9 M/M, 6 ft (1.8 m) long Equivalent to Radio Shack P/N 26-116

### Dewar

Aluminum-encased silvered glass vacuum flask Volume: 1000 mL ID: 2.75 in (70 mm) Height: 13.3 in (337 mm) Includes foam cap with slot and hole for supporting the Mr. SQUID<sup>®</sup> probe Equivalent to Pope Scientific Corp. P/N 8645/0099

The above specifications are effective 11/17/97 and subject to change without prior notice