



CS-3 CESIUM MAGNETOMETER

High Resolution Magnetics

CS-3 SPECIFICATIONS

Operating Principle:	Self-oscillation split-beam Cesium Vapor (non-radioactive Cs-133)
Operating Range:	15,000 to 105,000 nT
Gradient Tolerance:	40,000 nT/metre
Operating Zones:	15° to 75° and 105° to 165°
Hemisphere Switching:	a) Automatic b) Electronic control actuated by the control voltage levels (TTL/CMOS) c) Manual
Sensitivity:	0.0006 nT $\sqrt{\text{Hz}}$ rms.
Noise Envelope:	Typically 0.002 nT P-P, 0.1 Hz bandwidth
Heading Error:	± 0.2 nT (inside the optical axis to the field direction angle range 15° to 75° and 105° to 165°)
Absolute Accuracy:	<2.5 nT throughout range
Output:	a) continuous signal at the Larmor frequency which is proportional to the magnetic field (proportionality constant 3.49857 Hz/nT) sine wave signal amplitude modulated on the power supply voltage b) square wave signal at the I/O connector, TTL/CMOS compatible
Information Bandwidth:	Only limited by the magnetometer processor used
Sensor Head:	Diameter: 63 mm (2.5") Length: 160 mm (6.3") Weight: 1.15 kg (2.6 lb)
Sensor Electronics:	Diameter: 63 mm (2.5") Length: 350 mm (13.8") Weight: 1.5 kg (3.3 lb)
Cable, Sensor to Sensor Electronics:	3m (9' 8"), lengths up to 5m (16' 4") available
Operating Temperature:	-40°C to +50°C
Humidity:	Up to 100%, splash proof
Supply Power:	24 to 35 Volts DC
Supply Current:	Approx. 1.5A at start up, decreasing to 0.5A at 20°C
Power Up Time:	Less than 15 minutes at -30°C

OPTIONS

Options:	Your CS-2 sensor can be upgraded to a CS-3, just call for details
Processors:	Options may be quoted upon request
Systems:	We can provide you with suggestions for all your ancillary requirements regardless of the installation
Software:	Software processing, interpretation and presentation offered upon request
Training:	Training program may be provided either at our office or at your location to meet your requirements

An ISO 9001:2008 registered company

All specifications are subject to change without notice

P/N 762711 Rev. 3



CANADA

Scintrex
222 Snidercroft Road
Concord, Ontario L4K 2K1
Telephone: +1 905 669 2280
Fax: +1 905 669 6403
e-mail: scintrex@scintrexltd.com
Website: www.scintrex.com



USA

Micro-g LaCoste
1401 Horizon Avenue
Lafayette, CO 80026
Telephone: +1 303 828 3499
Fax: +1 303 828 3288
e-mail: info@microglacoste.com
Website: www.microglacoste.com