

QL40-MGS Data Sheet

The QL40-MGS (Bartington BSS-02A borehole magnetic susceptibility) tool operates with the Mount Sopris MATRIX Console and is typically used in mining applications. All electronic circuitry resides in a high strength non-magnetic enclosure and features a wide measuring range from 10⁻⁵ to 10⁻¹ cgs and will resolve strata down to 25 mm. The probe can be used in uncased or PVC cases boreholes, but not steel casing. The probe is not restricted by the type of borehole fluid.

With standard range, extended range, dual range magnetic susceptibility options the QL40-MGS is a versatile tool for delineation of kimberlite deposits, and other mining applications where large contrasting ferrous mineral deposits are likely. The QL40-MGS is typically combined with the QL40-IND dual induction probe to provide complimentary datasets for lithology and Geomorphological studies.

Applications

- Delineation of kimberlite deposits
- Economic evaluation of deposits
- Mineral exploration and characterization
- Lithology studies
- Extended range used in complex igneous or metamorphic rocks up to high magnetite rocks
- Ore Identification and quality correlation

Product Dimensions

Physical	Dimensions (L x W x H)	Weight
(instrument only)	86cm x 4.2cm x 4.2cm	4.75kg

Technical Specifications

Pressure Rating:	340 Bar (5000 PSI)
Sensor:	Focused Dual Coil (1.4KHz). AC-induced frequency discrimination.
Resolution:	Standard – 10 ⁻⁵ to 0.5 SI units Extended – 10 ⁻⁴ to 2 SI units
Accuracy:	< 3% F.S.
Intercoil Spacing:	Standard – 25 cm Extended – 30 cm
Operating Frequency:	~2 kHz
Zero Drift:	Standard – < 2.10 ⁻⁵ SI units/ 10°C Extended – < 1.10 ⁻⁴ SI units/ 10°C