

QL40-HM Data Sheet

The **QL40-HM** borehole magnetic susceptibility tool, operated with the Mount Sopris MATRIX Console, is commonly used in mining applications.

With a wide measuring range from 10?? to 0.5 SI units, the probe can resolve strata down to 25 mm. It works in uncased or PVC-cased boreholes but is not compatible with steel casings.

The tool's extended range allows for precise measurements in complex igneous and metamorphic environments, making it ideal for identifying magnetite layers and other iron-rich minerals.

This versatility is valuable for economic projects, particularly in delineating kimberlite deposits and other large ferrous mineral deposits.

The QL40-HM can be used alongside the QL40-IND dual induction probe to offer complementary datasets for lithology and geomorphological studies..

Applications

- Delineation of kimberlite deposits
- Economic evaluation of deposits
- Mineral exploration and characterization
- Lithology studies
- Extended range for complex igneous or metamorphic rocks, including high magnetite rocks
- Ore identification and quality correlation

Operating Conditions

W - Water ?

M - Mud ?

D- Dry ?

S - Steel ?

P - PVC Borehole ?

UC- Uncased

Product Dimensions

Physical	Dimensions (L x W x H)	Weight
(instrument only)	150 cm x 4.5cm x 4.5cm	7 kg

Technical Specifications

Pressure Rating: 200 Bar (2900 PSI)

Sensor: Focused Dual Coil (1.4KHz). AC-induced frequency discrimination.

Resolution:	Standard – 10?? to 0.5 SI units Extended – 10?? 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
Maximum Temperature:	70 °C