

MSIL™ | Multi-String Isolation Logging Tool - 3 1/2 in.



The MSIL™ evaluates the isolation behind casing without the need to remove the production tubing from the well.

Ratings & Dimensions

Max Temperature	350°F (177°C)
Maximum Pressure	20,000 psi (138 MPa)
Outer Diameter	3.50 in (88.9 mm)
Tubular Range	Tubing OD: ≥4.5 in (114.3 mm) Casing OD: ≤13.375 in (339.7 mm)
Length¹	8.92 ft (272 cm)
Weight	100 lb. (45.5 kg)
Tensile Strength²	Joints & Compression: 60,000 lb Torque: 150 ft-lb
Materials	Corrosion resistant materials used throughout

¹The length does not include centralizers. A minimum of two in-line centralizers are required when running the MSIL™ tool. One centralizer is placed at each end. Add approx. 2.2 ft. (67 cm) for each centralizer.

² Strengths apply to new tools at 70°F (21°C) and 0 psi.

Borehole Conditions

Borehole Fluids	Salt, Fresh and Oil
Logging Speed	Recommended: 20 ft/min (6.1 m/min) Maximum: 60 ft/min (18.28 m/min)
Tool Positioning	Centralized with one each centralizer above and below

Hardware Characteristics

Source Type	Piezoelectric
Sensor Type	Omni-Directional: Piezoelectric
	Radial: Piezoelectric with azimuthal sensitivity
Sensor Spacings	Receivers: 5 ft (152.4 cm); 3 ft. (91.44 cm)
Firing Rate	300 – 1000 ms variable via down-link
Waveform	3ft (91.44 cm), 5ft (152.4 cm), 4 Sectors
Recording Time	1280 µs for each receiver
Connections	Inverted GO (GOI) and 1-3/16-12 UN threads on top and bottom
Acquisition Mode	Surface Read-Out or Memory

Electrical Specification

Voltage (DC)	50V
Wattage	5W

Measurements

Radial Resolution	90 degrees (4 sectors)
Output	Primary: MSIL™ curve and 4 sector MSIL™ map Secondary: Head voltage, internal temperature, and relative bearing (Recommended to run in combination with GR/CCL)