MODEL 1670

ARC REFLECTION RADAR



Advanced Underground Cable Fault Location

The Model 1670 Portable Arc Reflection Radar delivers precise fault location in a rugged, field-ready design. Featuring a 10.5-inch high-contrast color display and resolution as fine as one foot on the 500-foot range, the 1670 provides the clarity and accuracy needed to locate faults across extended cable runs. High-speed digital sampling and intuitive controls streamline field diagnostics for faster, more informed decisions.

Designed for use with thumpers and energy-separating coupler/filters in arc reflection systems, the 1670 pre-locates high-resistance faults, low-resistance faults, splices, and opens in buried primary power cables. Digital radar technology captures fault traces during thumping, with automatic fault location positioning a marker and displaying distance when enabled. Operators can manually store up to 100 waveforms, review the 30 most recent automatically retained thumped traces, and adjust cable velocity settings for accurate measurements across different cable types. Automatic distance readout and zoom functionality simplify fault analysis across extended cable runs.

SPECIFICATIONS	
MODES	ARC REFLECTION CURRENT IMPULSE (OPTIONAL) DIRECT L1 3 PHASE COMPARISON AND DIFFERENCE
DISPLAY	10.5" DIAGONAL COLOR LCD DISPLAY
CABLE VELOCITY	25.0% TO 99.9%
RESOLUTION	1' ON THE 500' RANGE 100' ON THE 50,000' RANGE
ZOOM	FOR RANGES 3,000' AND ABOVE
SAMPLING SPEED	240 MEGA SAMPLES / SEC
MEMORY	100 WAVEFORMS MANUALLY
PULSE WIDTH	50 ns — 10 µs AUTO-ADJUSTS WITH RANGE
RANGE	TDR: 500 - 48,000' CI: 1,500 - 200,000' (METRIC SELECTABLE)
POWER	115/230 VAC, 50/60 HZ
DIMENSIONS	16.25 x 13 x 6.75"
WEIGHT	15 LBS.

Product Features

High-Resolution Fault Location

Achieves resolution as fine as one foot on the 500-foot range for precise cable fault location.

High-Speed Digital Sampling

Captures signal data at 240 megasamples per second for detailed waveform analysis.

Adjustable Cable Velocity

User-selectable velocity settings enable accurate distance measurements across different cable types.

10.5-Inch Color Display

Large, high-contrast LCD provides clear waveform visibility and distance measurements in field conditions.

Automatic Fault Distance Readout

Automatically positions a marker and displays distance to the fault upon capturing an arc reflection trace.

Automatic Waveform Capture

Automatically retains the 30 most recent thumped traces for quick review, with manual storage for up to 100 waveforms

Radar Engineers Inc.

Precision Instruments Since 1947

Mailing

9535 NE Colfax St.

Portland, Oregon 97220

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sales@radarengineers.com

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