MODEL 251

Parabolic Pinpointer



Ultrasonic Precision for Powerline Diagnostics

The Model 251 Ultrasonic Detector delivers fast, precise detection of arcing and corona on energized powerlines. Its rugged, one-piece design integrates a high-sensitivity directional ultrasonic sensor, 18.5-inch parabolic reflector, tuned receiver, and precision sight to accurately isolate airborne ultrasonic emissions produced by deteriorating electrical hardware. Independent gain control allows technicians to optimize sensitivity for varying field conditions, while the integrated analog meter, LED activity indicator, and audible output provide immediate confirmation for confident fault identification.

Designed to complement Radar Engineers RFI locating instruments such as the Model 243 and M-331, the Model 251 serves as the final confirmation tool in the diagnostic workflow. After RF detection narrows the search to the affected pole, the 251 pinpoints the exact sparking component through precise ultrasonic detection. Because ultrasonic signals require a direct line of sight to the source, technicians can isolate faults with greater confidence by evaluating hardware from multiple angles. By combining rapid RF detection with precise ultrasonic pinpointing, the Model 251 helps utilities locate faults more efficiently, confirm the source of arcing, and address developing equipment problems before they lead to outages or costly repairs.

SPECIFICATIONS	
OPERATING FREQUENCY	ULTRASONIC
TRANSDUCER	HIGH-SENSITIVITY ULTRASONIC TRANSDUCER
INDICATORS	SIGNAL-STRENGTH METER AND LED ACTIVITY INDICATOR
GAIN CONTROL	HIGH/LOW RANGE SELECTOR WITH ADJUSTABLE SENSITIVITY
AUDIO OUTPUT	BUILT-IN SPEAKER 3.5 MM HEADPHONE JACK
CONSTRUCTION	MOLDED PARABOLIC DISH WITH WEATHER-SEALED ELECTRONICS
POWER SOURCE	9V ALKALINE BATTERY (8 HOURS OPERATION)
DIMENSIONS	18.5” (DIAMETER) x 6” (DEPTH)
REFLECTOR DIAMETER	18.5” (47 CM)
WEIGHT	3 LB (1.36 KG)

Product Features

Directional Ultrasonic Detection

Pinpoints ultrasonic emissions from arcing and corona on energized powerlines.

Adjustable Gain Control

High/Low sensitivity settings with fine adjustment for varying signal strengths.

Precision Slotted Sight

Enables accurate alignment with individual components for targeted fault location.

18.5” Parabolic Reflector

Collects and focuses ultrasonic emissions for precise directional detection.

Integrated Analog Meter & LED

Provides visual indication of signal strength and detected powerline noise.

Rugged One-Piece Design

Built for reliable performance in demanding utility environments.

Radar Engineers Inc.

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