

SECTION 1: GENERAL INFORMATION

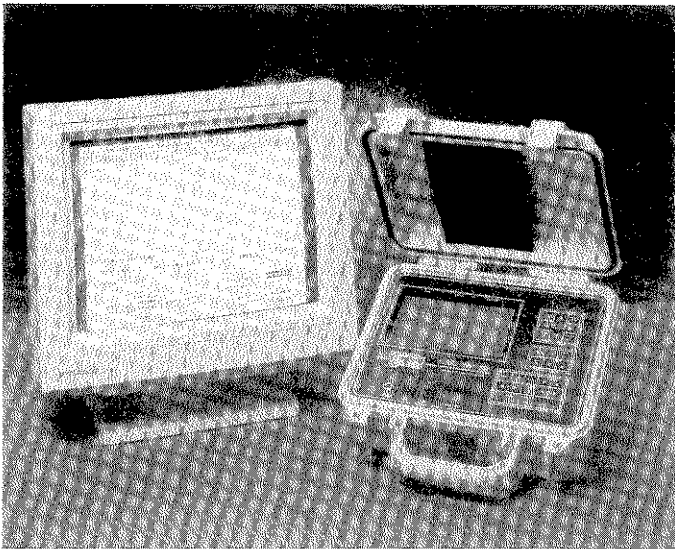
1.1 INTRODUCTION

RISER-BOND INSTRUMENTS' Model 1205T is a multipurpose Metallic Time Domain Reflectometer, Cable Fault Locator for use in Outside Plant. Model 1205T combines the latest in technology and user-friendly operation, creating the most versatile and accurate troubleshooting test set available.

Model 1205T is designed to quickly and easily locate cable faults in metallic cables. Using time domain reflectometry, or CABLE RADAR, the Model 1205T transmits a signal down the cable. Impedance discontinuities along the length of the cable reflect some or all of the signal energy back to the instrument. These reflections are measured and displayed as both a WAVEFORM and a NUMERIC DISTANCE to the fault.

RISER-BOND INSTRUMENTS' Model 1205T is Microprocessor controlled to provide the operator quick, simple, and accurate measurements of cable lengths, conditions, and faults. Digitized waveform, auto-distance calculation, and fault severity (dBRL or crosstalk) are all displayed simultaneously.

The Model 1205T will test all types of metallic paired cable for opens, shorts, crosstalk, impedance discontinuities, faulty connectors, water problems, bridge taps, load coils, rodent damage, intentional and accidental tampering, bad splices, and system components.



1.2 SPECIFICATIONS

Physical Dimensions:	Height: 10.5 inches (267 mm) Width: 9.75 inches (247.6 mm) Depth: 5 inches (127 mm) Weight: 8 lbs (3.6 kg)
Power:	Lead acid or NiCad battery pack.
Charger:	12 VAC, 1A (minimum) charger.
Environmental:	Operating temperature: 0°C (+32°F) to +50°C (+122°F) Typical temperature: -15°C (+5°F) to +60°C (+140°F) Storage temperature: -20°C (-4°F) to +60°C (+140°F) Humidity: 95% maximum relative humidity, non-condensing.
Display:	128 X 256 dot-matrix, Liquid Crystal Display (LCD) with Electroluminescent backlighting.
Horizontal Resolution:	<2000 ft (610 m): <.25 ft (.07 m) at .99 VOP <.07 ft (.02 m) at .30 VOP >2000 ft (610 m): 1 ft (.10 m) at any VOP
Vertical Resolution:	17 bits with 93 dots displayed on the LCD.
Output Pulse:	Multiple adjustable output pulse widths. Amplitude is less than +/-20 volts.
Maximum Range:	63,000 feet (19,400 meters) at .99 VOP 38,000 feet (11,700 meters) at .60 VOP Range varies with VOP. Maximum testable cable lengths varies with pulse width and cable type.
Vertical Sensitivity:	Greater than 65 dB.

Distance Accuracy:	+/- .5 ft (.15 m) plus +/- .01% of reading.
Input Protection:	400 volts (AC+DC) from DC to 400 Hz and decreases to 10 volts at 1 MHz.
Output Impedance:	Standard: 50, 75, 93, and 125 ohm, +/- 5% Optional: 100, 110, 120, and 130 ohm.
Auto dBRL:	2 digit auto return loss calculation at cursor set.
Auto Crosstalk:	2 digit crosstalk calculation at cursor set.
Velocity of Propagation:	Keypad selection from .300 to .999 in .001 increments.
Waveform Storage:	Standard: 4 at 12,000 samples/waveform 8 at 6,000 samples/waveform 16 at 3,000 samples/waveform Optional: 16 at 12,000 samples/waveform 32 at 6,000 samples/waveform 64 at 3,000 samples/waveform All with 16 Bit vertical resolution.
Noise Filter:	Standard: Two averaging filters. Optional: Multi-function/level filter routines.
Output Connectors:	Standard: Front Panel Female Banana Jack
Serial I/O Port:	RS-232
Accessories:	Standard: Battery pack, Battery charger, Operator's manual, Shoulder strap, 2 Probes, WAVE-VIEW software diskettes. Optional: Additional waveform storage package, Additional filtering package, Custom soft-side carrying case, Strand hooks kit, Extended warranty.