



# Model 1270A

## Metallic Time Domain Reflectometer Cable Fault Locator

*The right combination for success.*

### FEATURES/KEY BENEFITS

- **Direct connections from both coax and twisted pair** - Superior fault location in a variety of industries and applications. The 1270A will directly test coaxial cable and twisted pair cable by using front panel connections.
- **RANGE-PLUS** - Two-button operation that allows the operator to quickly scan the cable under test while automatically stepping through a specific pulse width, vertical gain, and cable length.
- **2-Line Input** - Connect two twisted pair cables simultaneously for comparison.
- **Sub-nanosecond Pulse Width** - Pinpoint minor faults which interrupt digital services and cause signal loss, ingress, and egress.
- **Intermittent Fault Detection (IFD)** - Monitor and locate hard-to-find intermittent faults using the IFD mode.
- **Dual Independent Cursors** - Measure between any two points on the waveform.
- **SUPER-STORE Waveform Data Storage** - Helps reduce downtime in a system. Simply connect the TDR, press "store", and have the system back up and running within minutes. Analyze the waveform later.
- **WAVE-VIEW Software** - Upload waveforms to your computer. Document before accepting new plant, save money when comparing replacement versus repair cost.
- **Rugged, weatherproof construction** - Rugged, weatherproof casing helps keep the 1270A on the job, regardless of location or climate conditions.
- **Easy-to-use** - Logical, step-by-step testing for fault location and diagnosis is easy-to-use by all levels of expertise.



**Radiodetection**  
*Riser Bond*

# Model 1270A

## Your Connection to Finding Cable Faults

### Product Specifications

#### Physical Dimensions:

Width: 10.5 inches (267 mm)  
Height: 9.75 inches (247.6 mm)  
Depth: 5 inches (127 mm)  
Weight: 6 pounds (2.7 kg)  
Power:  
Battery: Internal, rechargeable, 7.2 V Nickel metal hydride  
Charging Source: External 12 VAC transformer, 1.3 A  
Operating Time: Greater than 6 hours, continuous without backlight

#### Environment:

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:

320 x 240 dot-matrix, liquid crystal display (LCD) with cathode fluorescent (CFL) backlighting

#### Maximum Ranges:

63,700 feet (19,400 meters) at .990 VOP  
38,600 feet (11,700 meters) at .600 VOP  
Range varies with VOP. Maximum testable cable length varies with pulse width and cable type.

#### Horizontal Resolution:

Coax: <2,000 ft (610 m): <.05 ft (.03 m) at .999 VOP  
<.02 ft (.01 m) at .300 VOP  
Line 1, Line 2: <2,000 ft (610 m): <.25 ft (.08 m) at .999 VOP  
<.08 ft (.03 m) at .300 VOP  
Any input: >2,000 ft (610 m) 1 ft (.1 m) at any VOP

Vertical Resolution: 14 bits with 170 dots displayed  
Vertical Sensitivity: Greater than 65 dB  
Output Balance: Line 1, Line 2 only; Variable  
Output Connector: Front panel BNC and Banana jacks

Velocity of Propagation: Two user-selectable display formats.

VOP (%) with 3 digit precision ranging from 30.0% to 99.9%; V/2 with 4 digit precision (feet or meters per microsecond) ranging from 45.0 to 148.0 in meters mode or from 148.0 to 487.0 in feet mode.

### MAINTAINING THE CONNECTION

At Riser Bond Instruments, our first commitment is to you, our customer.

We start with product. Riser Bond builds our entire line of high-performance test equipment to meet your unique needs. And then we back them all with training, technical support, and the most comprehensive customer service and warranty in the industry.

When you choose Riser Bond, you have decades of product design knowledge and field experience inside every one of our state-of-the-art test instruments, and a guarantee of expert service after the sale. Riser Bond...maintaining the connection.

#### Input Protection:

400 volts (AC + DC) from DC to 400 Hz and decreases to 10 volts at 1 MHz.

#### Distance Accuracy:

Accuracy will vary with cable VOP and cable type.

Coax: +/- .1 ft (.03 m) plus +/- .01% of reading  
Line 1, Line 2: +/- .5 ft (.15 m) plus +/- .01% of reading  
Serial I/O Port: RS-232

#### Output Pulses:

Coax: sub-nanosecond, 2, 25, 100, 500 nanoseconds  
Line 1, Line 2: 2, 25, 100, 1000, 6000 nanoseconds

Auto dBRL: 2 digit auto return loss calculation at cursor setting

Auto Crosstalk: Line 1, Line 2 only  
2 digit crosstalk calculation at cursor setting

#### Waveform Storage:

Standard: 6,144 samples per waveform  
8 waveforms  
Optional: 32 waveforms

#### Automatic/Manual Noise Filter:

Standard: 8x Averaging, 50/60 Hz, Auto-Filter  
Optional: 4x, 16x, 32x, 64x, 128x Averaging

#### Accessories:

Standard: Operator's manual, Shoulder strap, Battery charger, Battery pack, Probes and connectors, Noise filters, WAVE-VIEW for Windows software, Clip-on accessory bag.

Optional: Additional waveform storage, Multi-function/multi-level noise filtering, Strand hooks kit, 12V Cigarette lighter charger, Custom Soft-side carrying case, Extended warranty.

Technological advances allow changes in specifications and/or components. Changes may be made without notification.

#### Radiodetection Ltd.

Western Drive  
Bristol  
BS14 0AF  
United Kingdom

Tel: +44 (0) 117 976 7776  
Fax: +44 (0) 117 976 7775  
E-mail: sales.uk@radiodetection.spx.com

**Radiodetection**  
154 Portland Road  
Bridgton  
ME 04009  
USA

Tel: (207) 647-9495  
Toll Free: (877) 247-3797  
Fax: (207) 647-9496  
E-mail: bridgton@radiodetection.spx.com



**Radiodetection**  
Riser Bond

**H. FRÖHLICH AG** <sup>TEC</sup>

H. FRÖHLICH AG - Industrietechnik  
Widenholzstrasse 1 - CH-8304 Wollisellen  
Tel. +41 44 910 16 22 - Fax +41 44 910 63 44  
info@h-froehlich-ag.ch - www.h-froehlich-ag.ch

ISO 9001 REGISTERED

261-0009-02