

Cable Fault Locator TDR RI-10M1



TDR RI-10M1 – TDR cable fault locator, designed to determine the nature and location of the irregularities and damages of the cable line ((opens, shorts, wet/corroded splices, water in the cable, load coils, bridged taps, unknown splices, splits and re-splits, capture intermittent fault etc.)

TDR-10M1 – a compact device designed for measurements on balanced and unbalanced cables.

Features

Types of measurements provided by the TDR unit:

- cable length measurement;
- measuring distances to impedance discontinuities or damages;
- measurement of the velocity factor of the line to its length known;
- determines the nature of faults;

Sphere of application

TDR-10M2 is used to control the laying and operation of the following types of cables:

- Telecom Cables;
- Signal and Control Cables ;
- Power cables;
- Aerial cable lines;
- Computer Networks;
- TV and radio cable lines;
- to determine the length of the cable in its production, storage and trade.

Cable Fault Locator TDR RI-10M1



Technical specifications

Measurement specifications	
The range of distance measurement (time delay)	from 0 to 50000 m (from 0 to 500 μ s)
Subranges (time delay)	0 – 125m (0 – 1.25 μ s); 0 – 250 m (0 – 2.5 μ s); 0 – 500 m (0 – 5 μ s); 0 – 1000 m (0 – 10 μ s); 0 – 2500 m (0 – 25 μ s); 0 – 5000 m (0 – 50 μ s); 0 – 12500 m (0 – 125 μ s); 0 – 25000 m (0 – 250 μ s); 0 – 50000 m (0 – 500 μ s)
Instrumental error of the distance measurement	from 0.04% to 0.4% depending on subrange (up to 0.5m @ $v/2=100$ m/ μ s depending on subrange)
Effective sampling rate	200 MHz
Range of impedance matching	from 25 Ω to 600 Ω
Pulse width	from 10 ns to 50 μ s
Pulse amplitude	10 V on the matched load
Sensitivity	1 mV (80 dB)
V/2 range	50.0 m/ μ s ... 149.9 m/ μ s (step 0.1m/ μ s)
PF range	1.00...1.50 (step 0.01)
Modes	TDR Cross-Talk detection

Display	monochrome 3.8 "(320x240 pixels)
Memory	100 waveforms
Computer interface	RS-232
Power	Li-Ion battery 7.4 V 1.9 A*h
Continuous operating time on battery power	at least 8 hours
Time of continuous operation through the AC adapter	Unlimited
Overall dimensions	110x230x190 mm
Operating temperature range	from -20 °C to +40 °C
Weight of device with battery	not more than 2.0 kg

Delivery Contents

Item name	Quantity
Cable Fault Locator TDR RI-10M1	1 item
AC Adapter 12 V	1 item
Connecting cable 75 Ohm, 1.0 m, BNC.M - «Alligator clip»	2 items
User Manual	1 item
CD-ROM with software	1 item
Accessories bag	1 item
Voltage protection unit UP-1 up to 380V (optional)	1 item
RS232-USB adapter (optional)	1 item