



TDR-420

Indeks: WMPLTDR420

Time Domain Reflectometer

Description

TDR-420 is a hand held Time Domain Reflectometer designed to identify and locate faults in power, telecommunications and teletechnical cables. TDR-420 reflectometer allows to measure the length of the cable and determine the distance to damage or impedance variation in the range of 4 m to 6000 m in conductors with metal wires. The shortest measuring range of 7 meters and a dead zone of 0.6 meters allows to locate damages at a very close distance from the place where the device is connected.

Two cursors allow to determine the place of two damages simultaneously and the distance between them.

Thanks to the color 3,5" TFT display with a resolution of 320 x 240 pixels, the indication of the location of the damage is precise and the results easier to interpret.



Difficult environment conditions during measurement work are frequent problems encountered by electric installers and maintenance services. Thanks to the unique housing TDR-420 ensure a degree of protection on IP67 level, what means dustproof and protection against water penetration during short-term immersion. Therefore, working in very dusty terrain or accidental contact of the device with water will not affect the correct operation of the reflectometer.



Technical Specification

Product features:

- Possibility damage-free location of impedance changes of tested cables and wires such as.:
 - shorted conductor,
 - open conductor / end of cable – useful during the inventory of warehouses and stores,
 - splice,
 - splitter,
 - water ingress,
 - wet splice,
 - - bridge tap
 - - or other changes.
- Single measurement mode **ONCE**,
- Continuously measurement mode **CONT**,
- Tone signal generator **TONE**,
- **Two cursors** to mark two places of damage along with an indication of the distance between them,
- Built-in **HELP** function for easier interpretation of the reflectogram,
- **11** available measuring ranges **from 7 m to 6000 m**,
- „dead zone” limited to 0,6 m,
- Color 3,5” LCD TFT display with resolution 320x240 pixels,
- manually set of sensitivity in 8 steps **GAIN**,
- output impedance regulation **up to 200 Ω** (possibility of measuring pre-insulated pipes),
- Velocity of Propagation set in range **from 10% to 99%**,
- tight and durable housing with **IP67** ingress protection degree.
- Small size and weight.

Technical specification:

- Measurement ranges: 7, 15, 30, 60, 120, 250, 500 m, 1, 2, 3, 6 km / 20, 45, 90, 180, 360, 750, 1500, 3000, 6000, 10000, 20000 ft.
- Accuracy: 1% of selected range.
- Resolution: Approx. 1% of selected range.
- Min. Cable length: 4 m / (14ft).
- Velocity of propagation VoP: Adjustable from 10 to...99% or 15... 148,5 m/ μ s.
- Output Pulse: 5 Vp-p (open circuit).
- Output Impedance: 25, 50, 75, 100, 120, 200 Ω .
- Output Impedance: 3 ns...3 μ s (depends of range).
- Scan rate / mode: Up to 3 scans / second (CONT) or single (ONCE).
- Tone generator: 810 ... 1110 Hz.

- Battery Life: Up to 8 hours of continuous scan.
- Power supply: 4 x alkaline batteries 1,5 V type AA or 4 x rechargeable batteries NiMH AA.
- Auto-OFF: 1, 3, 5, 10, 15 minutes or deactivated.
- Display: Color 3,5" LCD TFT, 320 x 240 pixels.
- Voltage protection: 400 V DC / 250 V AC.
- Dimensions: 220 x 98 x 58 mm (8,7 x 3,9 x 2,3 inches).
- Weight: 487 g.
- Electromagnetic standard compatibility EMC: EN 61326-1.
- Water/ Dust Proof: IP67.

Nominal condition of use

- Operating temperature: -20..+70°C,
- Storage temperature: -30...+80°C at humidity <80%