# TFL B5 Cable Fault Pre-locator



### Description

It is a menu driven microprocessor based cable fault prelocator is designed for ease of use.

It combines with both Time domain Reflectometer (TDR, pulse reflection ) and intelligent bridge testing (Bridge) for measuring the exact fault location such as open / broken

circuit faults, short circuit faults, cross faults, earth faults poor or low insulation faults in telecommunication or signal cables.

It is capable of giving IR test and displays insulation resistance in Meg Ohm in bridge mode.

## Application

It is used to pre-locate short circuit, open circuit cable faults distance in TDR and Low insulation faults in bridge mode use in telecom / signal and pilot cable fault location.

### Features

- TDR mode & Bridge mode
- Measurement maximum 8 km in selectable ranges.
- Portable design and easy to use.
- Menu driven operation.
- Tests any type of copper telecom and signal cables.
- Comparison between healthy with faulty cables.
- Use of high speed Micro-controller.
- Automatic selection of Range, VOP and Gain.

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- Automatic testing mode.
- Manual testing function is preserved.

- Color LCD Display (480 x 280 dots) humanized operation interface.
- Six function keys and simple operation.
- Both pulse reflection (TDR) and intelligent bridge (Bridge) testing for open, short, or low insulation cable faults.
  With mega meter it enables to test insulation resistance and loop resistance.
- With Pen drive, Easy to upload memory data to computer.
- Rechargeable lithium battery with intelligent charger
- Continued 8 hours operating time on internal battery.
- Small size, light weight and Palm-held unbreakable ABS plastic housing.





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## Working Principle

#### **TDR Mode**

A narrow electromagnetic frequency pulse of 40ns -10us with a fast rise time is sent on the cable that reflects back from the fault point / far end where the impedance was mismatched or changed. The velocity of propagation (VOP) for each cable depending on the cable dimension and material is set and the distance to the fault is then computed automatically and displayed in meter on LCD screen.

#### Bridge Mode

The equipment has menu driven insulation tester capable of giving IR test and displays insulation resistance in Meg Ohm. A healthy core / pair is used to get the loop resistance of the cable under test. When the faulty core/pair is connected to the equipment, balancing of the bridge is done automatically by the intelligent circuit incorporated in the equipment. However, the balancing can also be done manually in specific cases. After the balancing, the result of the fault distance from sending end is displayed on the screen.

### **Standard Accessories**

- Carrying case
- Re-chargeable battery charger / Adapter
- Connecting test cables

Software CD

- 8GB Pen Drive
- Instruction / User Manual

Standard Warranty

**One Year** 

### **Specifications**

Measurement TDR Mode & BRIDGE Mode Resolution 1 Meter mode Gain Range 1 - 99 Display Readout Color LCD and 480 \* 280 **TDR Mode BRIDGE Mode** 8 Km (240m, 480m, 1000m, 2000m, Fault Distance Range 4000m, 8000m) The max Length 10 Km Fault Accuracy 1 Meter of Testing Cable Pulse Width 40 ns - 10 us Max Poor 100 M Ohm Insulation Pulse Waveform Two polarity pulse Resistance Pulse Amplitude 0 - 30 V Adjustment adaptive Testing ±1% x Cable length **VOP** Range 100 - 300 Accuracy Impedance Automatic Maximum 100 M Ohm Matching Resistance of Defective Gain Adjustment Automatic and Manual Insulation Testing Accuracy ± 1% × Cable length Power Supply 7.4 V Rechargeable Li-on battery Measurement 0 Meter Charging Time 3 Hours Dead Zone **Operating Time** 8 Hours Auto 0 Meter Measurement Charging Voltage 230V AC ±10%, 50Hz, Single phase. Dead Zone -15 Deg C ~ + 55 Deg C Storage Temp. Output 25 - 120 Adaptive -15 Deg C ~ + 45 Deg C Working Temp. Impedance Dimension 212 (L) × 170 (W) × 90 (H) mm Sampling Speed 100 MHZ Weight 1.27 Kg Approx PC Connectivity USB

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