



## TeiScout™ TS100 | TDR Cable Tester for Telephone Applications

### APPLICATIONS:

If your job is to find faults on telephone twisted pair cable, the Tempo TeiScout™ TS100 is built for you. Designed specifically for telephone local loop applications, the TS100 applies the newest technology to provide both ease of use and telephony performance that cannot be found in any other TDR.

The TS100 is designed for ease-of-use – you'll spend less time operating the TDR, and more time repairing faults. Simply select the cable type to be tested and the TS100 does the rest. Impedance, Vp, gain, pulse width, and vertical position are automatically selected and adjusted as you scan the cable. Just move the cursor to the fault to pinpoint its location.

On the performance side, the TS100 employs optimized pulsing and sampling, coupled with advanced filtering and signal processing techniques, to insure the maximum measurement range. That way, you'll always have a clean waveform for easier fault interpretation.

#### Short Pulse and Coax Option

The short pulse Option 01 provides a 5 ns pulse width for close-in resolution. Faults as near as 3 ft. from the pedestal can be located with ease.

Option 01 also includes a coaxial cable setup menu and an adaptor cable. This enables you to locate faults in coaxial cables used in today's emerging broadband systems.

Best of all, you get all this performance in the industry's most rugged TDR package. Come snow, rain, heat, and humidity, the TS100 keeps working, because you have to.



### FEATURES:

- Twisted Pair and Coax Testing in a Single Unit (optional)
- One-Step Setup
- Automatic and Manual Instrument Control Mode
- 15 km Fault Location Capability
- Rugged – Survives 2 m Drop
- Splash and Drip Proof
- Powered from AC Mains or Battery
- Single-Button Zoom Function
- Short Pulse Width Option (Includes Coax Testing Capability)
- Pair Comparison Mode
- Splits/Crosstalk Mode
- Intermittent Fault Location
- Measures Distance to Fault in Feet, Meters, or Time
- Configurable for Any Cable Type and Vp (0.300 to 1.000)
- Internal Storage for 20 Waveforms and Notes
- Serial Printer Output for Stored or Displayed Waveforms
- Accurate (±3 ft. at 10,000 ft.)
- On-line Tutorials
- Large Backlit Display

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### TelScout TS100 Characteristics

**Test Signal Output** – Standard: 1/2 Sine, balanced. Option 01: 1/2 Sine.

**Amplitude** – Standard: 20 V into 100 Ω. Option 01: 5 ns: +2.5 V into 100 Ω. 20 ns: ±1 V into 100 Ω. All other pulse widths: ±4 V into 100 Ω.

**Output Impedance** – Standard: 100 Ω. Option 01: 100 Ω.

**Pulse Widths** – Standard: 20 to 3,000 ns. Option 01: 5 to 3,000 ns.

**Input Protection** – ±400 V, DC + peak AC, to a maximum of 440 Hz.

**Maximum Range** – Standard: 15,000 m (45,000 ft.), depending on cable type and condition. Option 01: 10,000 m (30,000 ft.) depending on cable type and condition.

**Display Resolution** – 0.33% of selected range, 4.5 cm (0.15 ft.) minimum, on 640 x 200 high-resolution backlit LCD.

**Display Ranges** – Eleven display ranges plus single-button expand window. Ranges are user definable in manual mode.

**Filter** – High pass, cutoff frequency 150kHz, user selectable.

**Amplifier** – 5 mV reflection produces a full-screen vertical deflection.

**Gain** – 0 to 63 dB.

**Waveform Storage** – Up to 20 waveforms with notes.

**Horizontal Accuracy** – 0 to 5,000 m: ±1 m ± uncertainty in Vp. 5,000 to 15,000 m: ±2 m ± uncertainty in Vp. 0 to 2,000 ft.: ±2 ft. ± uncertainty in Vp. 2,000 to 10,000 ft.: ±3 ft. ± uncertainty in Vp. 10,000 to 20,000 ft.: ±4 ft. ± uncertainty in Vp.

**Serial Interface** – 9-pin D-type serial connector.

### General Characteristics

#### Environmental

**Temperature** – Operating: –15° C to +60° C. Non-operating: –20° C to +65° C.

**Humidity** – 95% RH, non-condensing.

**Shock** (test specification) – Survives drop of 2 m to concrete in standard soft case.

**EMI Emissions** – FCC part 15, subpart J, class A; VFG243 and EN55022.

#### Power

**Mains Operation** – Voltage Ranges: 110 V, 220 V, 240 V with appropriate AC to DC adapter.

**Battery Operation** – Operating Time: 8 hrs. continuous. Battery Saver: Selectable for 5 to 30 minutes or disabled.

### Physical

Dimensions	mm	in.
Height	30	12
Width	25	10
Depth	9	3.5
Weight	kg	lb.
Net	3	6.4

### Ordering Information

#### TelScout TS100

**Includes:** Test Leads (two sets), Soft Carrying Case with Shoulder Strap, U.S. AC Adapter/Charger (120 VAC, 60Hz, 9 V @ 1 A), Cigarette Lighter-DC Adapter, User Manual, Quick Reference Card, Rechargeable Internal Battery.

#### TS100 OPTIONS

- Option 01** – Adds 5 ns pulse width, coax setup menu, and adapter cable.
- Option 1C** – Changes U.S. AC adapter/charger to 119424000 universal Euro adapter/charger (220 VAC, 1 A).
- Option 2C** – Changes U.S. AC adapter/charger to 119423900 United Kingdom adapter/charger (240 VAC, 1A).
- Option 3C** – Changes U.S. AC adapter/charger to 119423800 Australian adapter/charger (240 VAC, 1 A).
- Option C3** – Three Years Calibration Service
- Option C5** – Five Years Calibration Service
- Option D1** – Test Data Report

- Option D3** – Three Years Test Data (requires Option C3)
- Option D5** – Five Years Test Data (requires Option C5)

#### INTERNATIONAL LANGUAGE OPTIONS

- Standard** – English.
- Option L1** – French.
- Option L3** – German (Operates in English, German Manual).
- Option L4** – Spanish/Portuguese (Spanish default).
- Option L6** – Portuguese/Spanish (Portuguese default).
- Option LC** – Czechoslovakian (English Manual).
- Option LD** – Dutch/French (Dutch default).
- Option LF** – Finnish (English Manual).