Flying solo in the telecommunications race

TX125 advanced digital line test set

Low cost single operator solutions for the digital services network

teletech

World-class products for the telecommunications industry

TX125 Advanced Digital Services Line Tester

The Teletech TX125 is an essential and practical tool for all telecommunications technicians. Australian-designed and developed, the TX125 is specifically suited to testing cable for the digital services network.

The TX125 is a low-cost, multi-function line test set, suitable for testing copper cable for any digital service.

This world-first unit is the result of close co-operation between Teletech and Telstra. The TX125 delivers state-of-the-art techniques for pre-qualifying and maintenance of the digital services network directly into the hands of the field technician.

Packed with features

Incorporating all the technical features of the TX120 ***(including the ability to remotely open circuit and short circuit the line using signalling over the line under test)***, the TX125 connects the line through to the exchange after testing is completed.

A groundbreaking feature of the TX125 is its ability to download and store pre-programmed automatic test sequences from a PC.

The pre-programmed "PC download" test sequences include those for ADSL, Pair Gain Systems, ISDN and all new high-speed digital services.

The TX125 offers ten separate test categories, all of which can be stored in a 1000 test memory or downloaded as auto-test sequences from pre-programmed PC programs. Measurement results are stored in the unit's memory for recall on to the screen for review or uploading to a PC for further analysis.

For ease of field operation, a clock and calendar keep track of when individual measurements are recorded.

Accurate & practical

The probe supplied with the TX125 delivers high levels of performance and sophistication. Apart from providing the usual pair tracing function, a high frequency mode is incorporated to facilitate checking of all HF signals on the line.

The TX125 incorporates a unique, world-patented feature that allows an unassisted operator working from the far end (up to 20 kms from sender to receiver) to remotely signal open and short circuit, with no time-out restrictions for unlimited periods, over the pair under test.

After tests are completed, TX125 will immediately re-connect the customer to the exchange.

The future of digital services network testing is now in your hands.

There is no other low-cost test set that offers the features and performance of the TX125.

Test features of Teletech TX125

- DC voltage.
- Loop resistance.
- 500V insulation resistance.
- Line balance.
- True multi-frequency line-loss measurements between 30 Hz and 2 MHz.
- Near End (NEXT) and Far End (FEXT) Cross Talk at any frequency between 30Hz and 2MHz.
- Power line interference at 50 Hz or 60 Hz and their harmonics.
- Noise measurement in four bands over the range 30 Hz to 2 MHz.
- Separate AC and DC voltage measurements for foreign battery.
- Download and store pre-programmed auto-tests from PC. Any tests for DSL, PGS or any other high-speed digital services can be loaded/downloaded.
- 1000 test memory for review or uploading for further analysis, with clock and calendar record.
- Open and short circuit remotely signaled for bridge-fault and pulse-echo testing.
- Exchange connect-disconnect signalled.
- Probe supplied as standard for both pair tracing and HF mode checking for presence of ADSL, ISDN, PGS signals.
- Test leads and clips supplied to sender and receiver. Special patch cords (Siemens, Krone, Quante etc) available.
- SENDERS are addressable so that up to three can be used simultaneously on different lines or on the same line.

Technical Specification TX125

1. Line Loss

Line Loss can be measured at a single frequency with selectable output levels and termination impedance. Line Loss can also be measured as a multi-frequency measurement over the entire range with selectable range and number of frequency measurements. Using the downloaded sequence feature any frequency can be chosen with a resolution 1 Hz.

Range/Resolution	0 to 60 dB / 1 dB
Frequency Range	30 Hz to 2 MHz
Sender Level	0 and -10dBm
Impedance	600 Ω, TN12 and (120 - j23) Ω

2. Noise

Frequency Range	50 Hz, 60 Hz, 300 Hz to 3 kHz, 3 kHz to 30 kHz, 30 kHz to 300 kHz, 300 kHz to 2 MHz
Range/Resolution	-70 to -20 dBm / 1 dBm
Weighting	Flat
Detection	Quasi-peak
Displays	Continuous and Maximum
Duration	40 hrs (battery life)

3. Line Balance (Longitudinal Conversion Loss)

Range/Resolution	40 dB to 70 dB / 1 dB
Source	1 Vrms, 3 kHz

4. Cross Talk

Both Near End (NEXT) and Far End (FEXT) Cross Talk can be measured.

Range/Resolution	-70 to -20 dB / 1 dB
Frequency Range	30 Hz to 2 MHz as for Line Loss
Sender Level	0 and -10 dBm
Impedance	600 Ω, TN12 and (120-j23) Ω

5. Loop Resistance

Range/Resolution	0 to 3 kΩ / 1Ω
Source	2.5 Vdc

6. Insulation Resistance

Tests	A-B, A-GND, B-GND
Range/Resolution	0 to 200 MΩ / 1 MΩ
Source/Impedance	500 Vdc / 200 kΩ
Duration	20 sec x 3

7. Foreign Battery

Tests	A-B, A-GND, B-GND DC and AC voltage
Range/Resolution	-400 to +400 V / 1 V

8. Line Voltage

Range/Resolution	-400 to +400 V / 1V DC and AC

9. Sender Physical

Dimensions	216 x 100 x 40mm
Power Supply	-48V exchange battery or internal battery
Battery	9V alkaline
Battery Life	Typically 120 hours use

10. Receiver Physical

Dimensions	216 x 100 x 40mm
Battery	9V alkaline
Battery Life	Typically 40 hours use

11. Probe Physical

Dimensions	168 x 31 x 24mm
Battery	9V
Battery Life	Typically 150 hours use

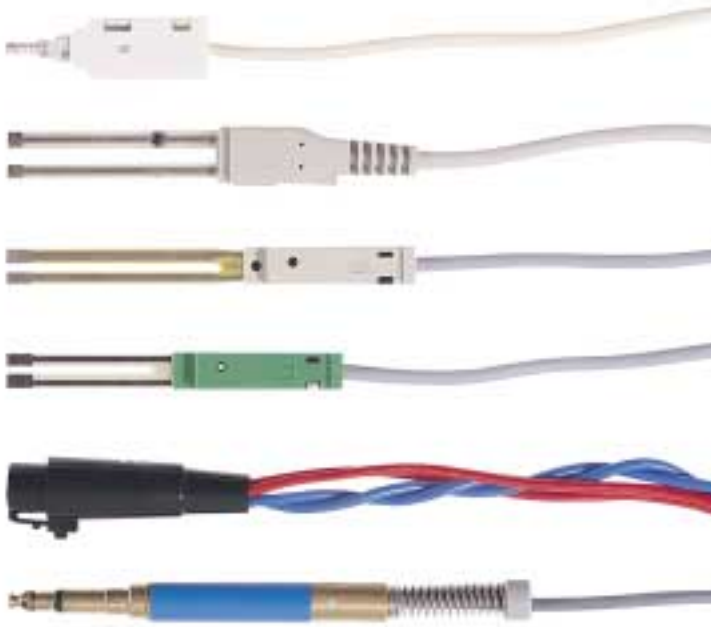
12. Environmental

Temperature	0 to 50°C
Humidity	<80% non-condensing

Note: Specifications subject to change at any time

The TX125 kit includes a remote SENDER unit, a RECEIVER unit which controls all tests, a PROBE, a set of GENERAL PURPOSE TEST LEADS and a TRAINING VIDEO. The whole kit is contained in a padded carry case, which has provision for a second SENDER unit. Optional special purpose leads as shown are available separately.

Probe for pair tracing & H.F. signals



Full range of accessory test leads

Kit includes full instructions and training video.

Protective carry case

Quality System
Quality Endorsed Company
ISO 9002:1987/AS 3902-1987
Licence QEC 3087
Standards Australia

teletech

World-class products for the telecommunications industry

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