

# TELSYS – Cable Mapping & Testing



*Teletech*

World-class products for the telecommunications industry

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Over the past decade, Teletech have been working to increase the technological sophistication and functionality of test equipment available to telecommunications providers. The latest technology from Teletech offers a leap forward in speed and accuracy in mapping, testing and updating of telecommunication cable network records.

**Introducing the TELSYS system.**

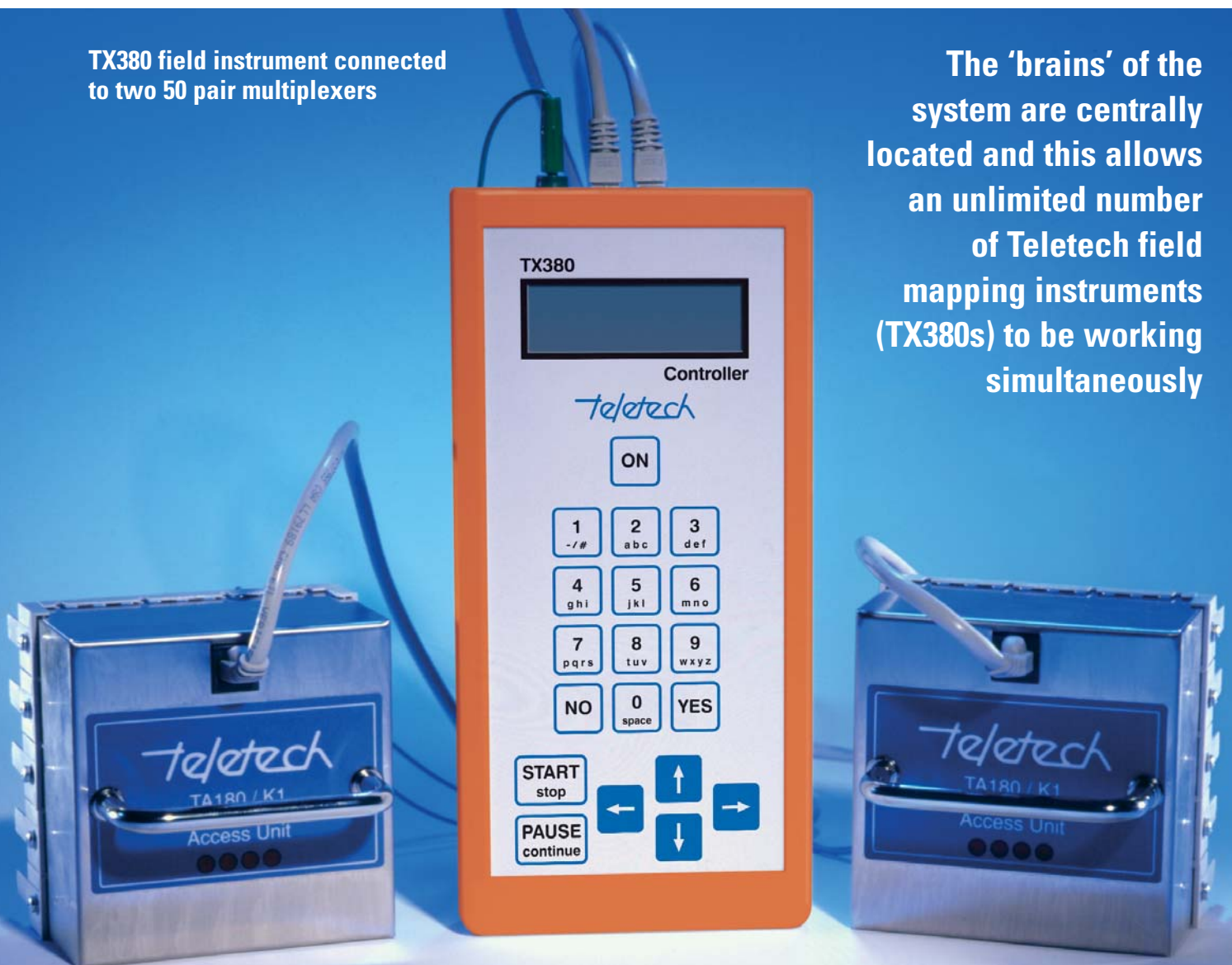
## The benefits of TELSYS

- Speed
- Accuracy
- Automation
- Powerful testing capability
- Permanent testing record
- A complete field testing management system

## New approach

Teletech have taken a new approach to the issues of cable/pair mapping and verification. Instead of the mapping process centred solely at the cabinet level, Teletech has turned this on its head and utilises the potential of their patented and proven Central Responder Unit (CRU) technology. The CRU's intelligent test heads and the availability of centrally located powerful computing resources gives a Telco unrivalled mapping and testing capability. The CRU is at the centre of TELSYS.

**TX380 field instrument connected to two 50 pair multiplexers**



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The 'brains' of the system are centrally located and this allows an unlimited number of Teletech field mapping instruments (TX380s) to be working simultaneously, passing data and information back and forth to TELSYS. Several TX380s are connected onto the cabinet pairs via multiplexer shoes all mapping and testing at the same time. Traditionally, only one instrument is used per cabinet. Instead Teletech is able to use several TX380s at once to enable a significant reduction in the time taken to map a cabinet.

The system of TELSYS, CRU and TX380s is designed to enable 'full' mapping of a cross connect cabinet. This system is able to map:

- Exchange side pairs
- Customer side pairs
- Continuity between the exchange and customer side pairs

The system also retains a permanent record of the:

- Telephone number of working services
- Electrical properties of the cables (both working and faulty cable)
- Broadband capability of the cables

The system then automatically reconciles the records against the Telco's existing cable record system/database. It provides reporting and files on the changes required to update the cable mapping records. TELSYS instantly builds a file of record changes at the completion of mapping a cabinet.

Teletech are able to configure TELSYS to automatically interface the changes into the Telco's cable mapping system.

A Telco can have a 1,000 pair cross connect cabinet mapped, tested and changes updated in their cable mapping system in less than half a day.

### Testing/measurement capability

#### DC volts

- A-B (Tip – Ring)
- A-G (Ground) (Tip - Sleeve)
- B-G (Ground) (Ring – Sleeve)

#### Resistance

- A-B (Tip – Ring)
- A-G (Ground) (Tip - Sleeve)
- B-G (Ground) (Ring – Sleeve)

### Current

- A-B (Tip – Ring)

### Capacitance

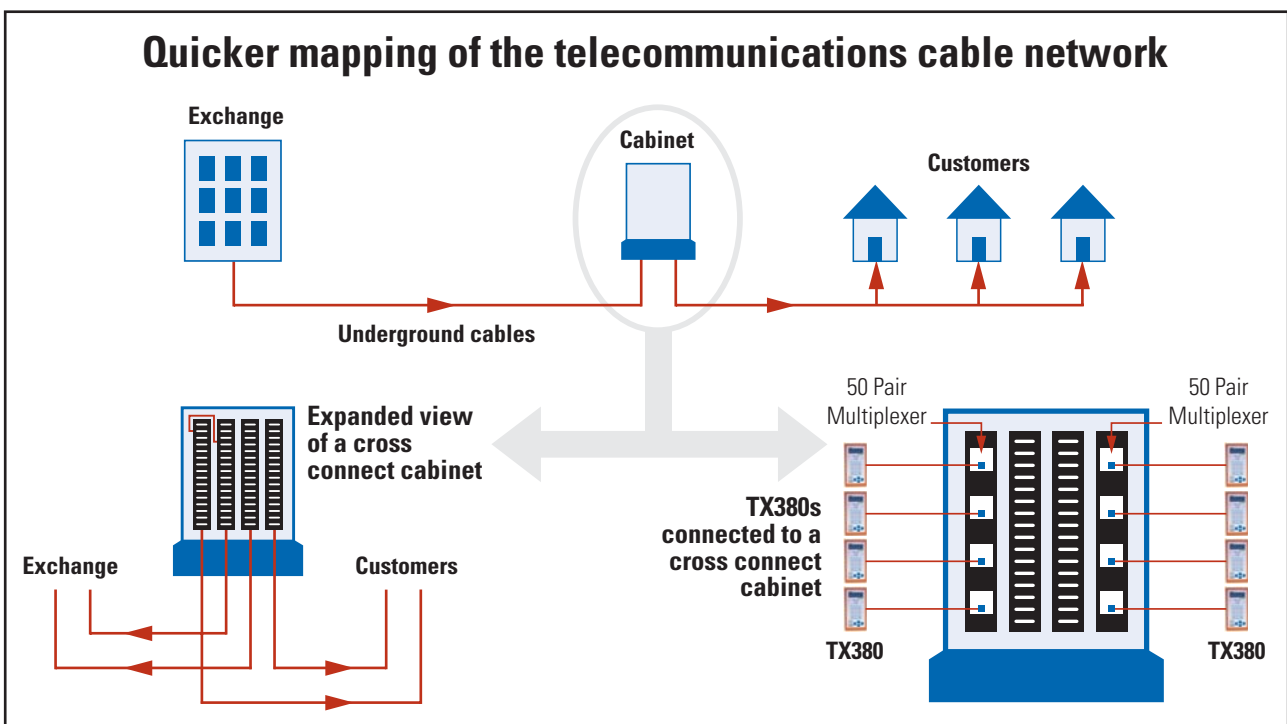
- A-B (Tip – Ring)
- A-G (Ground) (Tip - Sleeve)
- B-G (Ground) (Ring – Sleeve)

### Broad band tests

- Attenuation (estimated from double-ended test)
- Customer-end signal to noise ratio (estimated)
- Upload and download speed (bit rate) (calculated)

### Other specifications

- Operating temperature: 0 to 50° Celsius
- Storage temperature: -10 to +60° Celsius
- Humidity: 0 – 90% non-condensing





Teletech is a well established, Australian company supplying a unique range of telephone cable test instruments to the global market.

Our products are acclaimed for their accuracy, dependability and the delivery of end-user costs benefits. All of Teletech's products are supported by strong patents held in 18 major countries and are backed by worldwide strategic industry alliances.

Today, more than ever before in the telecommunications market, time is money. At Teletech, we deliver increased efficiency and innovative products into the hands of network operators and line managers via easy-to-operate test and diagnostic tools.

Teletech's products include a range of single-operator pair identifiers with remote control of the line termination. These include the Loop-a-Line range consisting of TX905, TX910, TX915, TX935 and TX961. The Teletech instrument range include cable testers to check the quality of lines for various broadband services including ADSL, HDSL, ISDN and SHDSL. These instruments include our TX120A and TX125 and a Multi-Line Identifier TX180. Teletech also make systems such as TELSYS, which have testers residing in the central office telephone exchange and operate with several field instruments including our TX325 and TX380.

All Teletech's instruments are designed and manufactured at our production facility in Vermont, Australia.



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

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