

TD30 Tan Delta Test System

FEATURES

- Lightweight portable unit
- Solid state air insulated design
- Suitable for use with the HVA30 VLF test system
- Test result storage to notebook or PDA via Wireless Bluetooth® connection
- Supplied complete with analysis software
- Real-time display of actual output waveform



**SMALLEST
LIGHTWEIGHT
TAN DELTA
SYSTEM
AVAILABLE**



APPLICATIONS

The TD30 provides the testing and commissioning engineer with a versatile high voltage tan delta measuring system suitable for testing electrical plant including cables: XLPE, PE, EPR, PILC etc.

DESCRIPTION

Tan Delta testing enables the cable test engineer to detect insulation defects before the cable fails in service. The TD30 is a versatile tan delta measuring system that is directly connected the HVA series of VLF test systems. The tan delta of the test object can now be quickly measured and the results stored thus providing a “signature” of the device being tested. This enables the cable engineer to now make tan delta routine test.



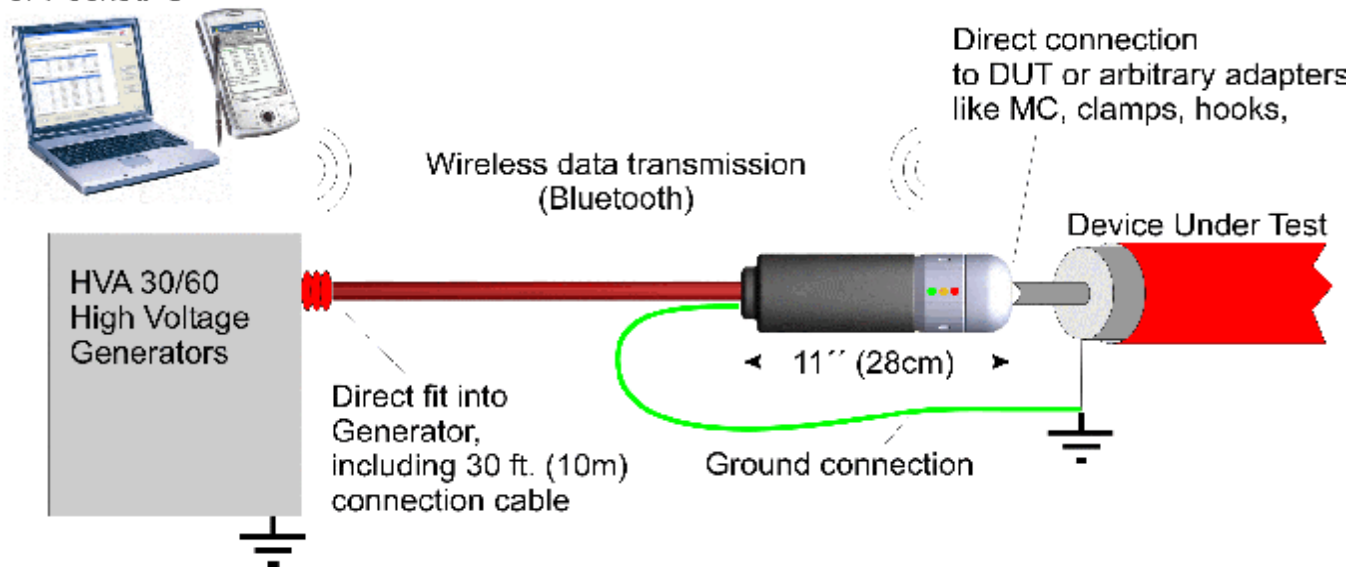
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PRODUCT DESIGN

The **TD30** is a battery-powered system that is directly connected to the HVA30 series of VLF test systems. The standard “C” size alkaline battery cells last for some 10 hours thus providing the capacity for many tests. The **TD30** is supplied with 30 feet of output cable, which is already terminated to interface with the HVA30 test system. The **TD30** is supplied complete with operating software, which gives a complete picture of the tan delta measurement together with a real time display of the output voltage and current. The data transmission to the notebook PC or PDA is via **Bluetooth** thus eliminating a direct connection between the TD30 and the data collection device.

Notebook
or PocketPC



TD30 TEST SETUP

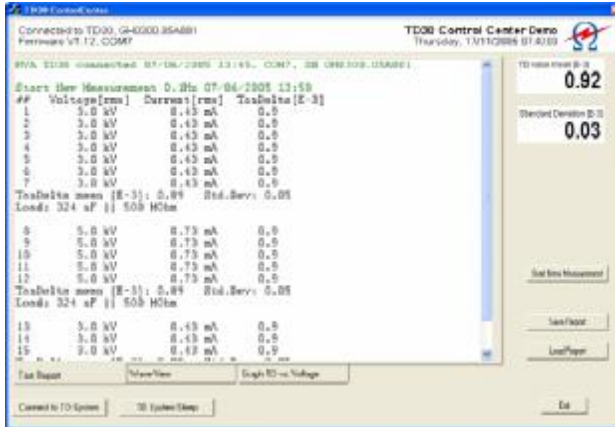
The TD30 test setup is very simple with very few connections required since it is already designed to operate with the HVA30 series of test systems.

In addition, since the data transfer is via Bluetooth, there are no physical connections to the notebook PC or PDA.



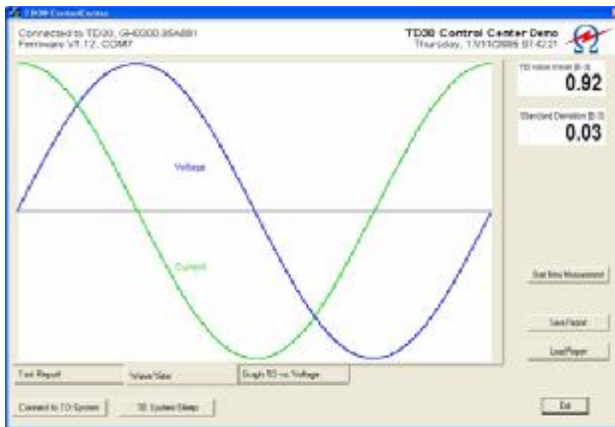
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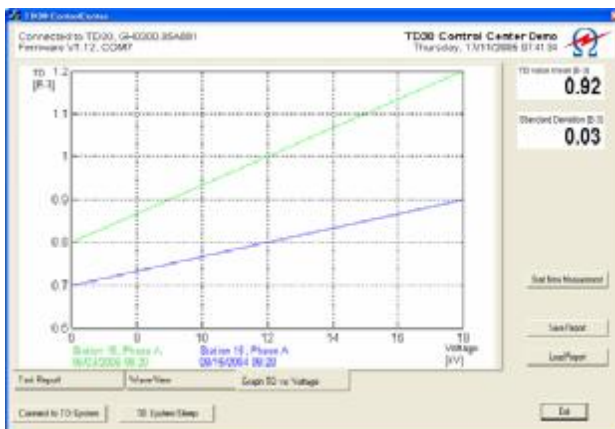
TD30 ANALYSIS SOFTWARE

There are 3 main screens associated with the TD30 software. The test report screen gives all the details of the measurements taken during a test sequence. The results are based on individual measurements per cycle of voltage and current. From these results the Tan Delta is calculated and displayed.



OUTPUT WAVEFORM SCREEN

In the Wave view screen, both the output voltage and output current are displayed simultaneously in real time. In addition, the status of the voltage and current waveforms the Tan Delta value is also displayed.



TAN DELTA CURVE SCREEN

The tan delta curve screen plots the measured Tan Delta with respect to the test voltage. On a good test sample, the curve should remain almost horizontal. However, on a faulty sample a Tan Delta “tip up” will occur alerting the test engineer to possible faulty sample. All 3 phases can be compared on the same diagram.



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Technical Data for TD30 Tan Delta Test System

Input Voltage	2 type "C" alkaline cells
Output Voltage	Sinusoidal: 1 — 23kV rms Frequency: 0.1 Hz
Voltage Measurement	Resolution: 0.1kV rms Accuracy: 0.5% of reading
Current Measurement	Resolution: 1µA rms Accuracy: 0.5% of reading
Frequency Measurement	Resolution: 0.01 Hz
Tan Delta Measurement	Resolution: 0.1×10^{-3} Accuracy: $\pm 0.2 \times 10^{-3}$ (load > 40nF) $\pm 0.5 \times 10^{-3}$ (load > 10nF)
Weight	3kgs (6.6lbs) not including batteries
Dimensions	240mm long x 80mm in diameter (9.5" long x 3.2" in diameter)
Computer Interface	Wireless. Results download software is included
Accessories Supplied	HV output cable, Transit cable, Earth Cable, Operating Software, Operating Manual
Standards	Shock: IEC68-2-27 (15g/11ms half sinus) Vibration: IEC68-2-6 (10.....150Hz : 2g) EMC: IEC6100-4-2, IEC6100-4-4, EN55011 Safety: EN60950, EN50191, EN61010-1
Temperature	Storage: -25° C to +70°C Operating: -5°C to +45°C

Note: Due to continuous development, the information detailed in this document may change without notice.

Still need convincing?

We welcome you to compare us to our competition.

***Please contact us should you
require further information.***



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