

# ST600 | CONTROLLED IMPEDANCE TESTER



- *TDR Technology ( Time Domain Reflectometry)*
- *IPC standards measurements*
- **7 Ghz** bandwidth
- *4 channels (2 x Diff + 2 x SE)*
- *New ESD protection technology*
- *High precision also at low impedance values*
- *Single Ended and Differential (true differential)*
- *Possibility of testing real traces (OBT)*
- *Traces length from 60 mm to 750 mm*
- *Complete waveform recording*
- *Virtual Retest*
- *Statistical Reports*
- *Selfcalibration and remote check up*

**ST600** is a controlled impedance tester that at a very affordable price offers a wide range of measurement capabilities according to IPC standards.

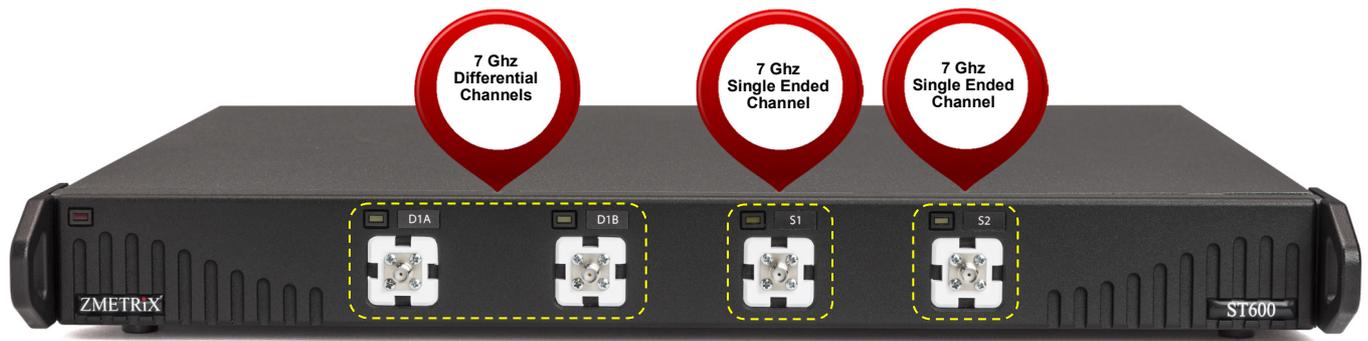
**ST600** is the most convenient instrument for the measurement of controlled impedance on Printed Circuit Boards.

**ST600** offers the widest bandwidth of its category allowing measurements impossible on other instruments.

**ST600** has not been designed to test just coupons. In recent years, the controlled impedance test market has seen increasing demand for on-board testing (OBT) of pcb product. This results in a need for test equipment that has the bandwidth to measure shorter traces, and probe accessories that can handle the increased bandwidth.

Thanks to its 7 Ghz bandwidth, **ST600** allows also the test on real traces without the need for coupons. The instrument can test traces with length starting at 60 mm up to 750 mm long. **ST600** has been designed for production. As all other **Zmetrix** instruments of **ST** series, its incredible resistance to ESD makes it a very robust solution for testing impedance in a production environment and not only limited to labs.

# ST600 Advance performance ...within your reach !



## Four Channels for all needs

**ST600** is equipped with 4 channels all with totally independent hardware. **D1A** and **D1B** are two differential channels at 7 Ghz with opposite polarity (*true differential*). **S1** and **S2** are two Single Ended channels also at 7 Ghz. All four channels are capable of testing both coupons and OBT with traces starting at 60 mm long.

## New Zscan software

**Zscan** has been renewed. **Zscan** guides the user through the various steps of set-up, measurement and data processing. Software also includes a number of statistical tools for evaluation. The customer can also easily perform a daily calibration of the instrument thanks to the accessories supplied. Exporting data in various formats is also possible as well as interfacing with stack-up software.

## New range of probes

**ST600** has available a wide range of probes for all measurement needs. Their building technology makes them affordable and easily customizable on user request. The new range of probes can test OBT with pitches from 0,5 mm up to 1,5 mm and of course also all standard tests on coupons for which several pins configurations are available. Whatever the measurement, **ST600** has a probe that's right for the job.



## Selfcalibration and auto check up

High precision semi-rigid standards are now embedded in the electronic of the **ST600** which can now perform an auto-calibration at every test. A new snapshot function allows a total check up of the instrument from remote. No more worries for tedious calibrations or troubleshooting.

## An open system

Thanks to its hardware and supplied software, **ST600** is open for connection to automatic measuring systems. **Zmetrix** has developed a range of options for the manufacturing of high frequency fixturing and for connection to flying probes machines.

### Technical Specs

Measurement range	: 0-200 ohm
Precision	: 1% on all range
Impedance resolution	: 0,03 ohms
Linear resolution	: 3 points/mm
Trace length	: from 60 mm to 750 mm
Calibration	: four points : 25,50,75,100 ohm
Bandwidth	: 7 Ghz