



## Extreme Temperature Tester E-Line

Temperature tests on wireless components in a shielded environment

- ◆ Test of different DUTs and/or standards (e.g. GSM, WCDMA, Bluetooth™) in the same test run
- ◆ Up to 12 DUTs
- ◆ Cost reduction of up to 80% compared to discrete solution (equipment and test time)
- ◆ Temperature range  $-40^{\circ}\text{C}$  to  $+80^{\circ}\text{C}$  (according to automotive component standards)
- ◆ Runs with any existing test system (e.g. production/conformance/QA test systems from Rohde&Schwarz)
- ◆ System software based on TestStand



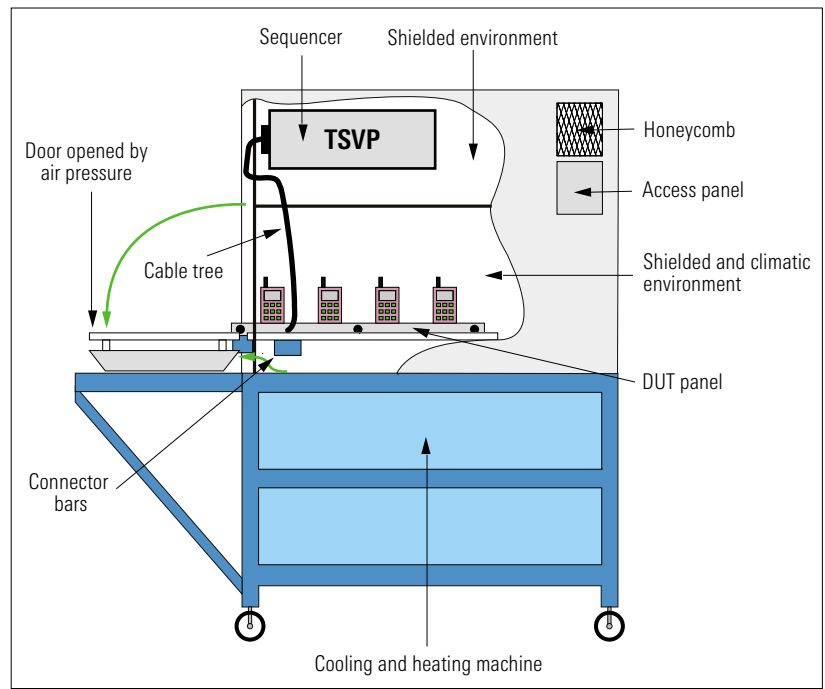
**ROHDE & SCHWARZ**

## Brief description

The Extreme Temperature Tester E-Line is a measurement environment for wireless RF devices (e.g. mobile phones, Bluetooth devices, and remote keyless entry systems).

The E-Line combines a shielded environment with a temperature-controlled chamber. Used as a test sequencer, the TSVP allows several devices to be measured in the same test run.

The E-Line is software-controlled and handles all communication with the measurement system (e.g. a production test system from Rohde&Schwarz).



Side view of the E-Line with details

## Hardware

The E-Line provides a shielded and climatic environment. The system is approx. 2 m high and has the width of a 19" rack. The E-Line also allows 19" devices to be integrated.

The system comes with a panel for taking up the DUTs. The panel can be provided according to the customer's specifications.

The DUTs are connected via special fixtures, which are mounted on the DUT panel. The number of DUTs measured in the E-Line depends on the size of each individual DUT.

## System concept

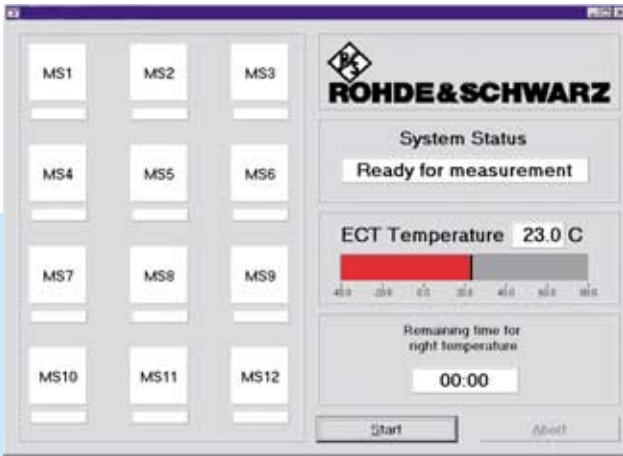
The E-Line can be used as a measurement environment for any existing test system. The TS7100 from Rohde&Schwarz is an ideal measurement system solution. Thanks to the flexibility of the system and the software, it is also possible to integrate any measurement device into the system.

The E-Line is also equipped with maintenance openings for easy access to all cables and devices.

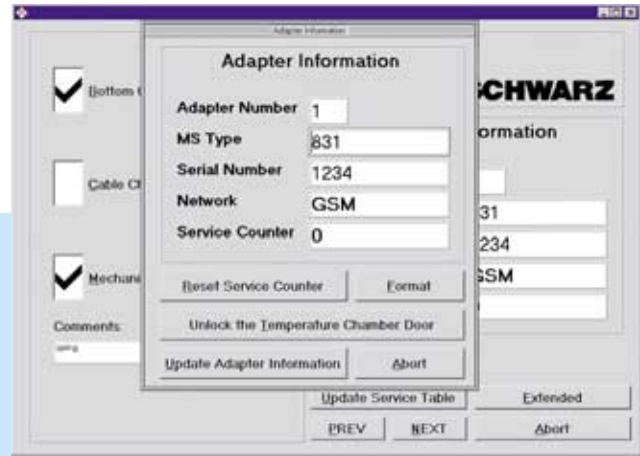
## Software

The system software is based on TestStand. This allows the user to control not only the E-Line (temperature, relay switching, etc), but also the whole measurement system, which may be a single instrument (such as the CMU from Rohde&Schwarz) or a complete test system.

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Main menu of extreme temperature software



E-Line service program

## Specifications

Electrical data	
Frequency range	0.5 GHz to 3 GHz
Shielding effectiveness	>60 dB
RF connectors	N type
Temperature	
Temperature range	-40°C to +80°C
Temperature change rate	3.5°C/min, typ.
General information	
Height	2 m
Width	19" rack
Position of DUT panel	1 m above floor

Test volume	>150 l
6 HU for other devices are provided inside of the shielded part	
E-Line is mounted on ESD wheels	
General feedthroughs within the system	RS-232-C VGA Ethernet mouse and keyboard mains air inlet
Mains supply	380 V AC, 3 phase

Certified Environmental System  
**ISO 14001**  
 REG. NO 1954

Certified Quality System  
**ISO 9001**  
 DQS REG. NO 1954



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