

# Functional Test

Keysight Technologies and  
The Test Connection, Inc.

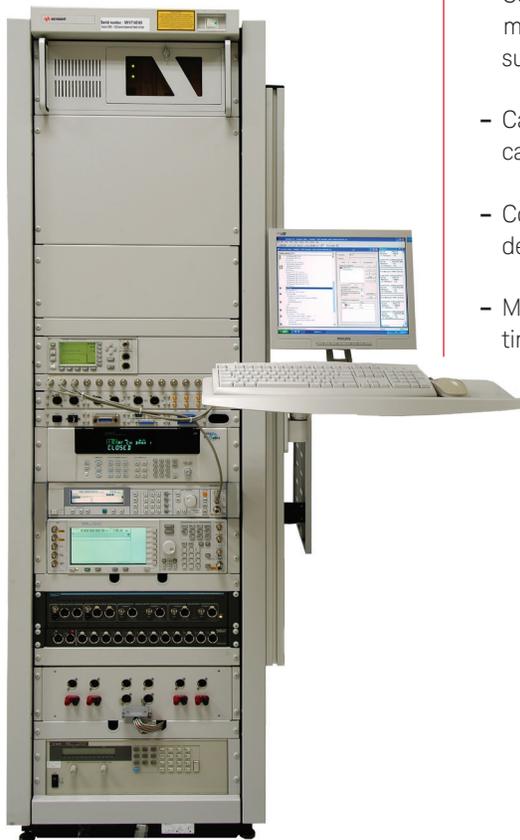
## Meet your functional test needs, on time and in budget

Designing a test solution to achieve your functional test needs can be time consuming and costly. In an environment of time and budgetary constraints the creation of in-house, special-to-type functional test systems can no longer be justified. Every new unit-under-test shouldn't need a different functional test system or all new software. Your functional test resources need to be utilized across different products in order to maximize your return on investment.

Many factors must be considered in developing a functional test system - the characteristics of the unit-under-test, the test coverage required, test times, the resources available, and the overall budget. You need to balance the three constraints of performance, cost, and time in order to create the optimum functional test solution.

The focus on performance, cost, and time lies at the heart of The Test Connection Inc.'s (TTCI) approach to functional test. TTCI creates functional test solutions for its customers by building on the capabilities of the Keysight TS-5000 family of functional test platforms.

The TS-5000 family comprises a range of preconfigured test systems that provide high speed measurements and high power DC/AC capability for testing complex electronic devices in applications such as: automotive, smart meters, avionics and others.



- Configurable functional test systems that meet your needs
- Based on Keysight TS-5000 functional test platform
- Configured with Keysight switching matrix, instrumentation and power supplies
- Can use standalone, modular, or card-cage instruments
- Complete solution, from requirements definition to deployment
- Meet your functional test needs on time and in budget

## Functional Test



TS-5000 systems can include, as standard, a 320 x 4 line signal switching matrix, load switching up to 30 amps, multiple power sources up to 1200 W, a DMM, counter and a function/arbitrary waveform generator. To extend this configuration you can specify additional test resources from Keysight's wide range of standalone, modular, and card-cage instrumentation in order to create a system that meets your exact functional test needs.

TTCI uses the TS-5000 as the platform for creating functional test systems for its customers. Working with the customer, TTCI will create a detailed system requirement definition including test instrumentation, estimated test times and throughput, the physical

footprint of the systems, and all key specifications. From the initial proposal TTCI will develop and implement the hardware and software resources necessary to meet your needs. TTCI can provide delivery, installation, training, and support services to ensure rapid and effective deployment.

With its extensive experience in functional test and its worldwide service and support organization TTCI can fully utilize the capabilities of the Keysight TS-5000 series to supply cost-effective solutions that achieve your exact functional test needs.

### System Components

#### Keysight Technologies

TS-5000	Functional test system platform
34980A	Multifunction switch/measure unit
34410A	Digital multimeter
34411A	Digital multimeter
53131A	Universal frequency counter/timer
33220A F	unction/arbitrary waveform generator
66xxA	Power supply
N67xx	Modular power supply

#### The Test Connection, Inc.

XJTAG (-PXI) or (-Link2)	Boundary scan testing modules in PXI or USB
FR01ATO	FLASH programming module
IC board or fixture	Interface connector board or bed of nails fixture
Third-party instruments	As specified

To learn how this solution can address your specific needs please contact

Keysight's solutions partner,  
TTCI

[www.keysight.com/find/ttci](http://www.keysight.com/find/ttci)



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Extending our solutions to meet your needs

Keysight and its Solutions Partners work together to help customers meet their unique challenges, in design, manufacturing, installation or support. To learn more about the program, our partners and solutions go to

[www.keysight.com/find/solutionspartner](http://www.keysight.com/find/solutionspartner)

The Test Connection, Inc. (TTCI) has been supporting electronics test for over 30 years by offering printed circuit test solutions including In-Circuit Test (ICT) development, Flying Probe development, Boundary Scan Test Solutions and Functional Test System development.

[www.ttci.com](http://www.ttci.com)

For information on Keysight Technologies' products, applications and services, go to

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