

# Keysight Technologies

## TS-8989 PXI Functional Test System

Maximizing test coverage with Minimum system size

### Industries and Applications

- Automotive Electronic Control Unit Test
  - Immobilizers, Electronic Parking Brakes (EPB), Airbag Control Unit, Electronic Clutch Applications (ECA), Body Control Module (BCM)
- Industrial Electronics Test
  - LED Driver Modules

### Product Description

The Keysight Technologies, Inc. TS-8989 PXI Functional Test System provides manufacturers with a cost effective, integrated, modular PXI-based measurement and high current switch load unit system in a box.



Product features	Benefit
Integrated PXI Chassis and Switch/Load Unit (SLU)	<ul style="list-style-type: none"> <li>- All in one compact system in a box</li> <li>- Scalable and modular with 8-slots PXI and 11-slots switch or load cards</li> <li>- Can be used as a bench top or integrated into a rack</li> <li>- Space optimization up to 8U rack height</li> </ul>
Signal Switching <ul style="list-style-type: none"> <li>- Up to 64 x 4 per matrix card (with Auxiliary)</li> </ul>	<ul style="list-style-type: none"> <li>- Switching speed as fast as 300 <math>\mu</math>s</li> <li>- Multiple signal and load routing</li> <li>- Long lasting and reliable switching connections up to 100 million operation cycles</li> </ul>
High Current Load Switching <ul style="list-style-type: none"> <li>- Up to 40 A 8-channels per load card</li> <li>- Up to 48-channels 2 A per load card</li> <li>- Three types of load cards</li> <li>- Current sense capability</li> <li>- Flyback protection</li> </ul>	<ul style="list-style-type: none"> <li>- Enable connections to internal and externally defined loads (resistive, capacitive and inductive) for load simulation (e.g. motor)</li> <li>- Available in Single-load, Dual-load, Quad-load types</li> <li>- Flexible for Pull Up/Down Loads, Bridge Loads, Multiplexing Loads</li> </ul>
Measurement <ul style="list-style-type: none"> <li>- 6.5 digits M9183A Digital Multimeter</li> </ul>	<ul style="list-style-type: none"> <li>- Fast measurement speed up to 15,000 reading per second</li> <li>- High precision with basic DCV accuracy 90 ppm</li> </ul>

Product features	Benefit
Test Sequencer <ul style="list-style-type: none"> <li>- Keysight TestExec SL as default test executive</li> </ul>	<ul style="list-style-type: none"> <li>- TestExec SL is a manufacturing test sequencer help to accelerate program development and test integration.</li> <li>- TS-8989 is compatible with any other test sequencers that support C and IVI-C, IVI-COM driver</li> </ul>

### Specifications

Hardware	
PXI chassis	8 slots (cPCI, PXI-1)
Switch/load unit	11-slots with integrated 8-ch DIO, $\pm$ 12 V fixed DC supply
Dimension in mm	483.85 (W) x 372.06 (H) x 543.14 (D)
Base configuration	<ul style="list-style-type: none"> <li>- 1 E87x2A pin matrix and instrument card</li> <li>- 1 M918xA 6.5-digit DMM</li> <li>- 1 U8989A-PCx industrial or embedded PC controller with test sequencer and action library</li> </ul>
Software	
Operating system	Windows 7 Professional 64-bit
Test sequencer	TestExec SL v7.1 with TS-5000 v7.1 library
Included hardware drivers	C or IVI-C, IVI-COM

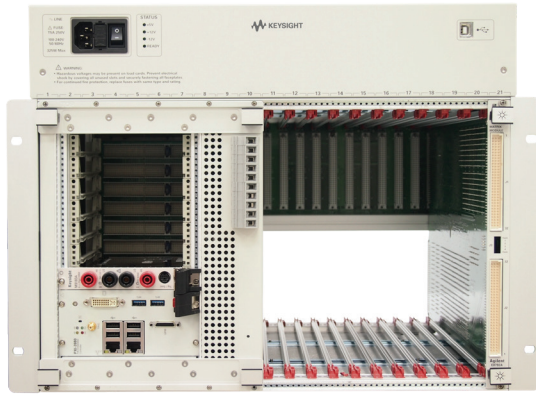


Figure 1. U8989A – front

Model	Description
U8989A	<b>TS-8989</b> PXI Functional Test System
PXI Instrument Options	
U8989A-310	<b>M9182A</b> PXI digital multimeter and cable
U8989A-311	<b>M9183A</b> PXI digital multimeter and cable
U8989A-330	<b>M9216A</b> 32-channel data acquisition and cable
U8989A-335	<b>M9185A</b> 8-channel digital/analog converter and cable
U8989A-336	<b>M9185A</b> 16-channel digital/analog converter and cable
U8989A-340	<b>M9186A</b> voltage/current source and cable
U8989A-350	<b>M9187A</b> 32-channel digital input/output and cable

## Ordering Information

Keysight offers a variety of configuration options for the TS-8989 to suit different product applications. Please contact your Keysight sales representative for the best option to suit your needs.

### Pin Matrix Card Options

E8782A-FG	TS-5400 SLU pin card with instrumentation matrix 24 instrument, 40 measurement
E8783A-FG	TS-5400 SLU pin card 64x4 measurement matrix
E8792A-FG	TS-5400 SLU pin card with instrumentation matrix 16 instrument, 32 measurement
E8793A-FG	TS-5400 SLU pin card 32x4 instrumentation matrix

### Load Card Options

E6175A-FG	8-channel 7.5 A load card
E6176A-FG	16-channel 7.5 A load card
E6177A-FG	24-channel 2 A load card (without current sense)
E6178B-FG	8-channel 30 A load card
N9377A-FG	Dual-load 16-channel 7.5 A load card
N9378A-FG	Quad-load 24-channel 2 A load card
N9379A-FG	Dual-load 48-channel 2 A load card
U7177A-FG	24-channel 2 A load card (with current sense)
U7178A-FG	8-channel 40 A load card
U7179A-FG	16-channel 15 A load card

For more information on Keysight Technologies' products, applications or services, please contact your local Keysight office. The complete list is available at: [www.keysight.com/find/contactus](http://www.keysight.com/find/contactus)

[www.keysight.com/find/ts8989](http://www.keysight.com/find/ts8989)

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