

TS-323 SERIES

GENASYS DIGITAL AND ANALOG TEST SYSTEM PLATFORM

- PXI-based architecture offers compact footprint, open architecture, and expandability
- High performance digital subsystem
- Hybrid pin capability
- Comprehensive tools for migrating LASAR based programs
- L300 fixture compatibility option
- Ideal for upgrading / replacing legacy Teradyne L200/L300, GenRad 2750 and VXI-based digital systems



DESCRIPTION

The TS-323 GENASYS platform is a PXI based test system which is designed to address a broad range of mil-aero and mission-critical products that require performance functional testing. The GENASYS offers best in class digital test capabilities which can effectively address the test needs associated with legacy ATE systems including the Teradyne L200/L300, GenRad 2750 and VXI-based digital systems. The TS-323 is available with range of digital and analog instrument options for addressing both LRU and SRU test needs. The system can be configured with different receiver options, allowing customers retain their investment in fixtures and simplifying TPS migration from a legacy test platform to the GENASYS.

FEATURES

The TS-323's core system includes the GX5960 digital subsystem which offers best-in-class performance digital test capabilities. Featuring a 50 MHz vector rate, programmable voltage levels per pin, timing per pin and multiple timesets, the GX5960 subsystem provides all of the features necessary for complex functional testing or for legacy test program migration. Additionally, the GX5960 subsystem provides access to an analog bus, allowing each digital channel to have hybrid signal capability when configured with an analog switching matrix which provides any resource to any pin signal routing. For multiplexed pin configurations, the GENASYS can be configured with 1:16 multiplexer switch cards, providing over 4000 multiplexed pin connections to the UUT interface.

The core system includes the 20-slot, GX7005A 6U PXI chassis which can supply up to 4.5 kW of system power and is capable of supporting a digital subsystem configuration of up to 528 channels. The system also includes two user power supplies, a 6½ digit DMM, and switching. Control of the system is provided by an embedded Windows controller or an external PC. A wide range of optional instrumentation and switching is available, allowing the GENASYS to be configured for a customer's specific needs.

TS-323 Core System

The core system includes the following features:

- GX7005A 20-slot, PXI chassis with (19) 6U peripheral slots.
The chassis offers an integrated Scout receiver as well as high voltage power supplies to support the digital instrumentation.
- GX5960 high performance digital subsystem, providing 32 channels per card with per pin attribute programmability
- Embedded or desktop controller with Windows OS
- GX6315 7 A switch card
- GX6616 high density switch matrix card
- GX7400A, 300 W, dual channel, user power supply
- GX2065 6½ digit DMM
- High density, 8000 I/O Scout receiver with integral direct access adapters, providing a reliable and high performance wireless interface from tester instrumentation to the tester's receiver interface.

TS-323 SERIES

TS-323 Analog Instrument Options

Analog source and measure options for the TS-323 system include:

- GX1110 Arbitrary Waveform Function Generator(100 MS/s, 12-bit)
- GX1120 Dual-Channel Arbitrary Waveform Function Generator(250 MS/s, 16-bit)
- GX2472 Dual Channel Digitizer
- GTX 2200 series Counter / Timer

TS-323 Analog Switching Options

Analog switching options for the TS-323 system include:

- GX6062 16 channel, 1:12 100 MHz multiplexer
- GX6264 16 channel, 1:16 multiplexer
- 26 slot, analog matrix subsystem with 16 wire bus and 16 x16 switch cards

TS-323 User Supply and SMU Options

Programmable user supply and SMU options include:

- Agilent N6700 programmable power supply mainframe and DC modules
- Keithly 2600 Source / Measure Units (SMUs), (single and dual channel)

In addition, a wide range of 3rd party PXI, cPCI, and GPIB instruments can be integrated into the test system to meet specific test needs.

Receiver Options

Optional receiver configurations for the TS-323 include:

- TTI Testron (GX2270 style)
- Teradyne L300
- Virginia Panel VP90

System Self-Test

The TS-323 is delivered with a system self test which includes an interactive self-test software procedure as well as a self-test adapter. The self-test verifies functional integrity of the system and resource connections to the test system interface.

SOFTWARE

The TS-323 includes ATEasy, a test executive and test programming software suite as well as all of the necessary instrument drivers. In addition, for applications that require the importing of LASAR .tap files, optional DtifEasy can be used to import and execute LASAR-based digital vector files for go / no-go, fault dictionary, and guided probe applications.

APPLICATIONS

- LRU and SRU test and repair
- Depot repair of avionics modules and systems
- Legacy test system replacement / upgrading

TS-323 SERIES

SPECIFICATIONS

ELECTRICAL AND MECHANICAL CORE SYSTEM	
Mainframe	GX7005A, 20 slot, 6U PXI chassis
Embedded CPU	i7, 2.53 GHz
Memory	4 GB
Hard Disk	160 GB (min)
CPU Interfaces	USB, 10-Base T, 100BaseT, 1000BaseT, VGA
External CPU	MXI-4E
Digital Instrumentation	(1) GX5964, 32 channel, 50 MHz, 6U PXI card (1) GX5961, 16 channel, timing / sync, 6U PXI card Expandable to 528 digital channels Per pin programmability, -14 V to +25 V Includes direct connect adapters
DMM	GX2065, 6½ digit DMM, internally connected to system switch matrix
Switching	(1) GX6616 configurable matrix, 6 x 2:16 (1) GX6315 45 channel, 7 A relay card, 9 relay drivers Includes direct connect adapters
UUT Power	GX7400, 2 channel, 150 W / ch. Programmable DC supply, 3-slot, 6U form factor Configurations: 15 V @ 10 A, 30 V @ 5 A, 60 V @ 2.5 A
UUT Interface	6U, MAC Panel Scout Interface
Input Power	3 phase, 115 VAC, 20 A / phase, 50/60 Hz 230 VAC, 10 A, 50/60 Hz
ENVIRONMENTAL	
Operating Temperature	0 °C to +50 °C
Storage Temperature	-20 °C to +60 °C
Relative Humidity	90%, non-condensing
Altitude	30,000 ft
PHYSICAL	
Weight	150 lbs (core system)
Size (Chassis)	10U (17.5") H x 17.6" W x 24.3" D
Overall Size	36U rack, 74 inches H, 23.6 inches W, 35.4 inches D

Note: Specifications are subject to change without notice

ORDERING INFORMATION

TS-323-L3	GENASYS Base Test System includes chassis, controller, master control panel, 36U rack, and L300 receiver with cabling, vacuum control, and self test fixture
TS-323	GENASYS Base Test System includes chassis, controller, master control panel, 36U rack, and TTI receiver with cabling, vacuum control, and self test fixture

TS-323 SERIES

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MANUFACTURING