1.3 Modular Platform 6TL 32

Features

- Expandable
- Modular build-up using 19 inches standard instruments and devices, 100% reconfigurable, upgradeable and reusable into other platforms
- Standardized Test Fixtures for VPC Gemini 12 (12 or 18 modules) (Off line) and 25 module (In line) Receivers for testing PCB's, with linear pushing system included or using an additional Servo Pusher in combination with low cost fixtures
- > Able to manage up to 40 GHz signals
- Industrial PC Controller with auxiliary UPS included allowing automatic starting at Power-On and a controlled Power-down even in case of a Power Failure
- > Touch screen display
- Advanced CAN bus Control for all 6tl modules including Operator Virtual Control Panels allowing manual operation and test software debugging
- YAV switching and special function modules, with minimal interconnection cabling needed, and keeping optimal Signal Integrity. The modules can manage signals from DC up to 2, 5 GHz
- > Test Fixtures Identification and automatic Test Executive Software Selection.
- Smart Test Fixtures include Non Volatile DUT data and Programmable Maintenance Period Counters for test probes replacement
- Advanced Test Software based on NI LabView® /Test Stand® and Phi6® Test Manager
- Options for Barcode and/or Data Matrix Readers, Printer, platform status Beacon and RF screened fixtures
- > Teleservice by Ethernet with fixed IP address

In line platforms features

- > Automatic conveyor width adjustment
- > SMEMA connection to input and output transport lines
- > Mass Interconnection Receiver VPC® 9025

Applications

- > Electronic Boards Test
- > LED Lighting Devices Test
- > Assembled Electronic Products Test





1. OPEN TEST PLATFORMS

1.3.1 H71003200. Off-Line Modular Test Platform

Features

- Platform for off-line open test systems integration able to be expanded and upgraded to in-line test systems
- Mass interconnect Receiver Virginia Panel Gemini 12 (12 slots) or Gemini 12X (18 slots) standardized for EMS
- Smart fixtures
- > Teleservice by Ethernet fixed IP
- > Fixtures compatibility with 6TL-22 platform

Applications

- Electronic Boards Test
- > LED Lighting Devices Test
- > Assembled Electronic Products Test



6tl-32 Platform is a perfect basis for an automatic integrated Test System for medium to high manufacturing volumes. Important technical and economical advantages due to its modular structure and expansion capability are evident.

The base system can be used as a stand-alone system or being integrated in a single or multiple units providing a high throughput in-line production test system.

The System Control and Automation is based on CAN bus. One single four-wire cable provides power to and control all the devices. The system is simple, easy to maintain and cost effective.

It includes an industrial PC Controller and UPS that controls all steps for automatic error free power-up and down of the test system. To start working with the Test System during production it is not needed to have any know-how of the Windows operating system or any additional test system knowledge. After Switching ON the power, the System automatically initializes the test system and starts the test software. Then it identifies the attached test fixture and automatically selects the adequate executive software that matches the connected test fixture. The Controller has 6 free slots to install additional PCI cards.

Different test fixtures can be used to test PCB's or assembled products. For testing PCB's, there is a choice of standard fixture platforms including their own linear pushing system, or alternatively a low cost fixture solution using our automatic precision servo pusher module with three pre-set test position levels for HiPot test, Functional Test and ICT test using different lengths of test probes. Test Instruments may be selected in PCI format (6 free PCI slots are available in the PC Controller), PXI format after installing an optional 5 to 18 slots PXI chassis, or any other LXI, VXI or other Rack & Stack type of instrumentation.

Optional accessories are available:

- Controlled Rejection Bin to force controlled removal of rejected DUTs preventing any mixture with good boards. The bin can be installed at the top or middle right or left side of the test platform.
- > Printer to print Test Results or an Identification Label
- > Bar Code or Data Matrix Reader
- > Platform Status Indication light tower
- > Auxiliary Side Table

All the installed devices include an Operator Virtual Control Panel to allow manual operation, test software debugging and problems diagnostics. Each 6tl-22 Test Platforms includes Remote Service capability trough a fixed IP, Internet Connection.

Includes the teleservice by Ethernet fixed IP



1.3.2 H71003210. One module In-Line Test Platform

Features

- Stl-32 In-line test platform including extended SMEMA synchronization for OK/ NOTOK and DUT OK signal at the output transport lines.
- Allows the use of dual dwell test fixtures able to execute simultaneously two test processes (For example: software loading in the first dwell and functional test in the second one), improving the test throughput.
- PCB servo pusher controlled by a servomotor, with 3 test position levels, for different lengths of test probes (Hipot, Functional and ICT tests).
- Fixture Servo Lifter with automatic DUT capture including a home position to allow quick fixture change over.
- YAV switching boards at VPC Receiver side: Reduce cabling, signals coupling and contact resistance. Maintains the maximum signal integrity.
- Enough free space for additional 19" instruments in front and back side of the platform.
- > Data logging of test data and test results and documentation.
- > Optional Data Matrix reader for DUT indentification and tracking
- > DUT transfer speed adjustable up to 24 m/min.
- Pusher cassette able to install test probes for top probing, pneumatic and electronic actuators, automatic trimmers and cameras for vision analysis.
- Teleservice by fixed IP Ethernet connection.

Applications

- Electronic Boards Test
- > Assembled Electronic Products Test







1. OPEN TEST PLATFORMS

1.3.3 H71003220 & H71003230. Two & Three In-Line Test Platforms

Features

- Modular build-up using 19 inch standard instrumentation, modules and devices, 100% reconfigurable, upgradeable and reusable into other platforms.
- Standardized fixtures with VPC Gemini 9025 (25 modules) mass interconnect interface.
- Industrial PC Controller with auxiliary UPS included. Allowing automatic start at Power-On and a controlled Power-down, even in case of Power Failure.
- > Touch screen display.
- Advanced CAN bus Control for all 6tl modules including Operator Virtual Control Panels allowing manual operation and test software debugging.
- > Options for mounting NI PXI chassis
- YAV switching and special function modules, with minimal interconnection cabling needed, providing optimal Signal Integrity.
- > Modules can manage signals from DC up to 2, 5 GHz.
- > Test Fixtures Identification and automatic Test Executive Software Selection.
- Advanced Test Software based on NI LabView® /Test Stand® and Phi6® Test Manager.
- > Options for BAR Code and/or Data Matrix Readers, Printer, platform status Beacon and RF screened fixtures.
- > Teleservice by Ethernet fixed IP address.

Applications

- Electronic Boards Test
- > LED Lighting Devices Test
- > Assembled Electronic Products Test





When joining three 6tl-32 modules, you get up to 6 test stations, allowing a large number pf different test configurations in a high throughput production environment.

This system is highly versatile with a quick test fixture change over system, based on a VPC mass interconnect interface with 25 modules, allowing to setup multiple test station combinations and getting an optimal throughput performance when high volume production rates are required. Every 6tl-32 module can have a dual dwell fixture, providing a cost effective line-up solution to up to 6 stations, that can be balanced to perform all test phases required by the DUT.

Example 1: Using three identical dual dwell fixtures for a complete test of 20 sec, a production rate of 720 units per hour can be achieved, with the advantage that all the fixtures are identical.

Example 2: Using three dual dwell fixtures, where the first station will perform an in-circuit test, and software loading. The second station will perform a functional test. Considering a total test cycle of 55 sec. per DUT (Software loading + Functional Test), a production rate of 180 units per hour can be reached. Using only one station module (1 Fixture), the maximum production rate will be 60 units per hour.





1. OPEN TEST PLATFORMS



Independent IPC, UPS, Monitor and Power management unit per station module



Fixtures enclosure with a lot of free space to include special custom test assemblies



Virginia Panel Mass Connection Receiver with up to 25 modules



Lifter home position to allow a quick 'Fixture changing' position.



High rack space for test instruments and ease cables layout.



Conveyor unit with synchronous AC motors for accurate stop and automatic wide adjustment.

ENVIRONMENTAL CONDITIONS

Operating Temperature Humidity Maximum Vibration Maximum Shock -10...+50 °C no ice 5 ... 85% 20 Gs 50 Gs Nominal mains voltage 230V 50-60Hz Maximum Power (Test Instruments not included) 800 W

GENERAL SPECIFICATIONS

DUT maximum area

450 x 350 / 550 x 350

ORDERING INFORMATION	P/N
Test Platform 6tl-32, 1 module, OFF LINE	H7100 3200
Test Platform 6tl-32, 1 module, IN LINE	H7100 3210
Test Platform 6tl-32, 2 modules, IN LINE	H7100 3220
Test Platform 6tl-32, 3 modules, IN LINE	H7100 3230
Bar Code Reader 7350.5000 with mechanical adapter	MMMS9520
Data Matrix Reader 7350.4000 with manual positioning adapter kit	H73504000
Fixture 7425 ITA 9025 INLINE 410x384	H72007425
Pushers cassette, 450mm with 10 pushers included	H72007945
CAN bus Three color Indicator Beacon	H78001000