

TestStation™ Multi-Site Inline

Easy Automation with Multi-Site Test Productivity

High Speed Automation

Teradyne's TestStation Multi-Site test systems deliver 2-4X greater test capacity compared to conventional single site systems, while reducing floor space and power requirements. Configure TestStation Multi-Site Inline with the TestStation Automated Inline Handler or choose to integrate into your existing automation.

TestStation Multi-Site models support a full range of MDA, ICT and functional production test capability and shares common software and hardware of the TestStation system platform. TestStation systems may be configured over a wide range of pin counts, automation and test options to meet every production test requirement.



TestStation Automated
Inline Handler

TestStation Multi-Site
Model 52

FEATURES

- Multi-Site Test architecture
- "Zero-Footprint" inline design fits most automated handlers
- SMEMA compatible handler
- Automation Pro software
- True no-touch, high-speed inline test
- Easily configured to deliver simple analog-only, in-circuit, and system level test

BENEFITS

- 2 to 4x greater throughput vs. conventional single site systems
- Reduce required factory floor space by half
- One-third the AC power provisioning of full-sized alternatives
- 50% lower fixture, operator & maintenance costs
- High parallel test efficiency
- Easy integration into standard automation equipment
- Simple maintenance and support

Seamless Inline Integration

The Multi-Site test architecture delivers true parallel production test. The system's ability to test two, three or more boards concurrently ensures that circuit board test is never a production bottleneck. Teradyne's TestStation Automated Inline Handler features a dual-scissors design that delivers accurate parallel platen control and resulting nail-to-test point accuracy. Its powerful servo motor delivers high-speed with precise control, to minimize handling time even with complex high-pincount fixture designs.

TestStation Multi-Site Inline systems provide straightforward integration into inline automation and material-handling systems. By residing completely within the line automation equipment footprint, TestStation Inline systems eliminate the long cabling between the Unit Under Test (UUT) and test instrumentation that results in reduced test accuracy and fault coverage. With a short set-up time, automatic fixture feed and interlocking mechanisms, manufacturers can save time and money automating their production line.

This seamless integration and standardization on the TestStation platform eliminates costly non-recurring engineering charges involved in custom tester-to-handler integrations. The TestStation Automated Inline Handler provides maximum flexibility and product scalability within the TestStation architecture with easy maintenance and supportable design. The TestStation systems features common programming, software, pin cards, SafeTest™ protection technologies and measurement instrumentation.

System Specifications

Base System+ Handler	<ul style="list-style-type: none"> Synchronized Analog and Digital Subsystems Configure Multi-Site Inline Model 51, Model 52 or Large Format Max Pin capacity: 5120 total pins or 6400 total pins All pins utilize parallel drive and sense capability Windows 7 PC Controller Color LCD monitor on adjustable height platform Ethernet Networking Interface Hardware Warranty Automatic Vacuum Control for single and dual well fixtures Requires compressed air (80 to 100 psi, 5.6 to 7.0 kg/sq meter) Vacuum (40 cfm, 1.13 cubic meters/min) Keyboard with integrated mouse System footprint: 33 x 43 in (TSH); 33.5x50 in(Large Format) 	System Software	<ul style="list-style-type: none"> Windows 7® Support Test/Debug System Software License Advanced AutoDebug / TestStation Debug Pro Automatic Fault Coverage Grading Test Execution Software Panel-Test Software Diagnostic Software Tools SoftProbe & BusBust Real-Time Data Collection Data Display & Data Logging Throughput Optimizer Production Assistant SafeTest Protection Technologies Factory Control Interface Variant Handling Software
Analog Hardware	<ul style="list-style-type: none"> Measurement Matrix: 8 channels scannable to any pin 2 Sources, configurable as current or voltage DCVoltageSource:programmable,16-bit,0to±18Vover4ranges,to ±1500mA, programmable current limiting DCCurrentSource:programmable,16-bit,0to±1500mAover8ranges, to ±18 V, programmable voltage limiting DC Voltmeter: 0 to ±1200 V over 9 ranges DC Ammeter: 0 to ±160 mA over 7 ranges Arbitrary Waveform Generator Reactance Module <ul style="list-style-type: none"> Programmable frequency from 15Hz to 100kHz Programmable AC level to 7 Vrms, 12-bit Programmable DC offset, 16-bit True RMS-DC Detection Differential Detector/DVM/Digitizer Coherent Transfer Function Measurement Component Measurement Capability <ul style="list-style-type: none"> Resistive (R) Range: 0.1 to 30 Mohm Capacitive (C) Range: 1 pF to 10,000 µF Inductive (L) Range: 10µH to 1,000 H ExternalInstrumentMatrix:9BNCsto8linetointernalinstruments or test pins Traceable Calibration Daughterboard High Voltage Source configurable as current or voltage, programmable voltage limit, ±120V, ±50mA IEEE-488 Interface Controller 	Software Options	<ul style="list-style-type: none"> Program Preparation License: <ul style="list-style-type: none"> TestStation Development Pro software D2B Alchemist CAD preparation software Analog,Digital,BoundaryScanandMixed-SignalDevice Libraries Hybrid Test Generator for functional applications Panel-Test Development Software Flash ISP Development Software Xpress Model Circuit Analyzer-Based-Test Generator ScanPathfinder II boundary scan test generation, execution, and diagnostics for boards with a mix of boundary scan and conventional devices BasicSCANmodelgeneratorforboundaryscandevices JunctionXpressvectorlesstesttechniquefordetecting open device pins and marginal solder connections Framescan Vectorless Test Technique for detecting: <ul style="list-style-type: none"> Open device pins Open connector pins Polarized capacitor orientation Correct device orientation Powerful test program language for easy creation of custom tests
Digital Hardware	<p>Common Driver Characteristics:</p> <ul style="list-style-type: none"> Range: 26 programmable drive levels from + 5.5 V to - 2.5 V Automaticdriveverificationateachpin:fourvoltagesselectablefor each pin OutputCurrent(withautomaticcompensationcircuitry)>600mA; Programmable Slew Rates 100 - 300 V/µS Typical Output impedance: <0.6 ohm Software Programmable Pull-up/Pull-down loads Driver Memory: 64K behind each pin <p>Common Sensor Characteristics:</p> <ul style="list-style-type: none"> 26 programmable dual sense thresholds + 5.5 V to - 2.5 V Sense thresholds independent of programmed drive level Input impedance = 100 Kohm Bit by bit compare and CRC capture modes Sensor Memory: 64K behind each pin <p>Clock Generation/Synchronization Characteristics:</p> <ul style="list-style-type: none"> Clock Generation frequency programmable up to 20 MHz Clock Synchronization frequency programmable up to 20 MHz 	Hardware Options	<ul style="list-style-type: none"> Test Points expandable to 5120 total pins Input power: 415V or 208V 3-Phase Flexible Power Supply Package - choose up to 4/7 power supplies from the following: 0-60 V @ 2.5 A, 0-20 V @ 8.0 A Fixed Power Supplies: +5 V @ 6 A, ± 15 V @ 1 A ConveyorWidthAdjustCapability:ManualorAutomatic BoardTransferHeight/-25mm:900mm,925mmor950mm BoardTravelDirection:Left-to-RightorRight-to-Left Press Force: 7kN, 10kN, 15 kN or 18 kN Servo-Driven Deep Serial Memory Instrument System Frequency Test Module Board Options: UltraPin II 121, 121A, 124, 124L, 128L, 128HD or Multi-Function Application Board



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