

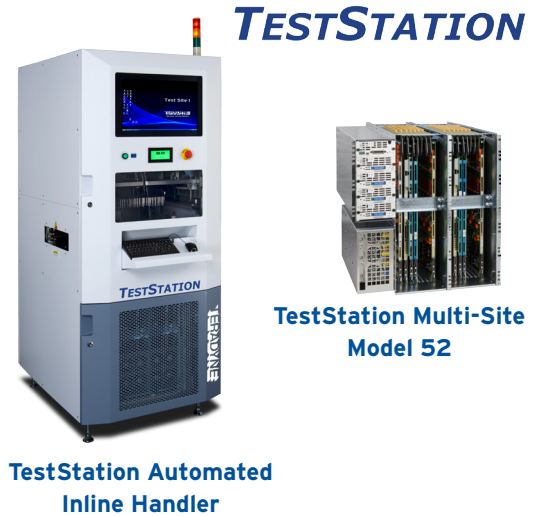
TestStation™ Multi-Site Inline

Easy Automation with Multi-Site Test Productivity

High Speed Automation

Teradyne's TestStation Multi-Site test systems deliver 2 to 4 times 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.

TestStation Multi-Site Inline

System Specifications

Base System + Handler	<ul style="list-style-type: none"> • Synchronized Analog and Digital Subsystems • Configure Multi-Site Inline Model 51 or Model 52 • Maximum pin capacity: 2560 • All pins utilize parallel drive and sense capability • Windows 7 PC Controller • Color LCD monitor on adjustable height platform • AC power EUR 230V/16A - Single Phase NAM 220V/16A - 2 phase • Ethernet Networking Interface • Hardware Warranty • Automatic Vacuum Control for single and dual well fixtures • System Footprint 850mm (L) x 1100mm (D) x 1800mm (H) • 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 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 • DC Voltage Source: programmable, 16-bit, 0 to ±18 V over 4 ranges, to ±1500mA, programmable current limiting • DC Current Source: programmable, 16-bit, 0 to ±1500mA over 8 ranges, 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 • External Instrument Matrix: 9 BNCs to 8 line to internal instruments or n 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, Boundary Scan and Mixed-Signal Device 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 • BasicSCAN model generator for boundary scan devices • Junction Xpress vectorless test technique for detecting 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 • Automatic drive verification at each pin: four voltages selectable for each pin • Output Current (with automatic compensation circuitry) > 600 mA; • 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 2560 • Input power: 415V or 208V 3-Phase • Flexible Power Supply Package - choose up to 4 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 • Conveyor Width Adjust Capability: Manual or Automatic • Board Transfer Height /-25mm: 900mm, 925mm or 950mm • Board Travel Direction: Left-to-Right or Right-to-Left • Press Force: 7kN or 10kN Servo-Driven • Deep Serial Memory Instrument • System Frequency Test Module • Choice of pin board options: <ul style="list-style-type: none"> • UltraPin II 121 • UltraPin II 121a - analog only • UltraPin II 124 • UltraPin II 124L • UltraPin II 128L • UltraPin II 128HD • Multi-Function Application Board