Products for Industrial Manufacturing Maintenance & Support

Precision Diagnostics for Industrial Maintenance

In fast-paced manufacturing (Mfg.) environments, precision diagnostics are essential to maintaining up time, reducing waste, and ensuring product quality. Maintenance teams must quickly isolate faults in control systems, sensor interfaces, and motor drivers—often without schematics or safe power-on conditions. Traditional methods fall short when dealing with intermittent failures, inaccessible test points, or undocumented legacy boards. Huntron's power-off Analog Signature Analysis (ASA) and automated probing solutions provide the accuracy, repeatability, and cost avoidance needed to meet these demands—enabling fast, confident diagnostics without risking further damage or downtime.

Key Challenges in Industrial Maintenance and How Huntron Solves Them

Industry Challenge	Huntron Solution
Unplanned Downtime from Equipment Failure	Huntron's test management software and automated troubleshooting solutions accelerate the repair process compared with conventional test and repair methods.
OEM Repair Lead Time and Cost	ASA is a power-off test method that enables in-house board repair. This saves time in not having to wait for a repair from the OEM. Cost is saved by avoiding expensive OEM repairs.
Limited Skilled Labor	Huntron tools help close this gap by transforming expert diagnostic knowledge into a repeatable, standardized capability that can scale across the entire organization. Intuitive test creation in the Huntron Workstation software and minimal onboard training make Huntron ideal for troubleshooting and repair.
Legacy Equipment and Obsolete Boards	ASA comparison between a known good board and a suspect board eliminates the need for board documentation or data sheets. Store the good board in Workstation to reference when testing suspect boards.

Huntron Features and Benefits

- PCAs of the current era continually get smaller and more complex. Automated micron level probing eliminates the error and time factor from manual hand probing for diagnostic or parametric testing.
- Huntron tools accelerate troubleshooting, providing a targeted area to look for issues on printed circuit assemblies (PCAs) and reducing equipment downtime. Automated testing via Access Probers cuts this downtime further, probing 10 times faster than manual methods.
- Completely customizable test routines can be integrated with existing test procedures.
- Troubleshoot undocumented or obsolete circuit boards by comparing to a known-good reference board. Isolate faults and repair at the component level instead of discarding the entire board.
- Multiple options available for training and onboarding onto Huntron systems as well as world-class support.

New Perspectives: Unlocking Success for Mfg. Maintenance & Support

Huntron products offer alternatives to the traditional fault-repair process. Its product suite supports preventative maintenance and fault prediction, helping identify issues before they occur. Build a database documenting faults and repairs to improve future diagnostics and reduce time to repair.

Let Huntron Help You Be Successful in Industrial Mfg. Maintenance & Support!

Huntron Products and Applications for Industrial Maintenance

Huntron Tracker – Models: 2800, 2800S, & 3200S

Application: The Huntron Tracker is used in Industrial Manufacturing Maintenance and Support to safely diagnose faults on printed circuit assemblies (PCAs) from failed equipment. The Tracker helps technicians identify component-level faults without requiring circuit diagrams, even on mixed signal boards. Safety restrictions in this industry often prevent any power on testing. The Tracker uses ASA, a power-off test, to capture the electrical response across two test points from an injected current-limited AC test signal. It supports preventative maintenance by comparing baseline electronic signatures and can verify refurbished equipment before it is returned to service. This non-invasive method helps extend equipment lifespan, reduce downtime, and decrease costs.

Description: The Huntron Tracker is a benchtop diagnostic tool that uses power-off Analog Signature Analysis (ASA) to identify component-level faults on PCAs.


Tracker 3200S

Tracker 3200S is Huntron's most advanced model, offering expanded ASA capabilities and flexibility. It includes two 64-pin IDC connectors and supports automated ASA testing when integrated with the Access 2 Prober.

Tracker 2800S is a durable entry-level model suitable for general troubleshooting and includes two 40-pin IDC connectors for scanning connectors and ports using custom cable interfaces.

Tracker 2800 is a durable entry-level model suitable for general troubleshooting.

Huntron Access Prober – Models: Access 2, DH2

Application: PCAs from industrial manufacturing equipment often contain compact and densely populated PCAs. Hand-probing boards like this are time inefficient and prone to errors. Access Probers use micro-stepping motors and linear encoders to place probes on the device under test with high precision. With micron level accuracy, these systems automate the testing process, allowing technicians to focus on other tasks while tests are performed independently. Access Probers are optimized for low-volume, high-mix testing environments, making them suitable for repair depots and service centers. Repeatable test profiles developed in Workstation, simplify switching between different boards. These systems can also be configured to work with external electronic measurement instruments such as oscilloscopes, digital multimeters (DMMs), and LCR meters, enabling integration with existing workflows.

Description: The Access Probers automate the testing of printed circuit assemblies (PCAs), achieving speeds up to ten times faster than manual methods. Using Huntron Workstation, a built-in camera is used to target probing locations, when CAD files are not available. Maintenance is straightforward, requiring occasional lubrication of the axis rails.


Access 2 Prober

Access 2 Prober includes a single flying probe head for benchtop testing. When paired with the Tracker 3200S, it enables automated, power-off Analog Signature Analysis (ASA) testing in Workstation.

Access DH2 model features two flying probe heads and can test across components with a minimum spacing of 50 mils (0.050 inches / 1.27 mm). It is housed in a mobile cabinet and includes integrated ASA testing. This system can be configured for 4-wire measurements.

Huntron Software – Huntron Workstation 4.3

Application: Store tests at the PCA board level and easily select them when equipment does fail. An available operator level interface mode allows technicians to run tests, keeping setup and configuration separate. **Huntron Workstation** enables users to perform tests consistently and record results at the circuit board level. It also supports integration with additional electronic measurement instruments, enabling centralized management of test procedures and data.

Description: **Huntron Workstation** is the central software platform used with Huntron Trackers and Access Probers. It provides a unified system for managing and executing test procedures. Built on a database foundation, Huntron Workstation is reliable, user-friendly, and adaptable to various testing needs.