

# SMART4METRICS

Bring test data and intelligence from TestStation into the factory and the enterprise. Merge test data, tester status and health data into the existing enterprise cloud.

The Internet of Things (IoT), is the core of the “Smart Factory”, interconnecting computing sensing, and control devices embedded in systems enabling them to send and receive data. Smart Factories require IoT to collect and move data in real time for automated process control. Teradyne’s Smart4Metrics integrates TestStation in-circuit tester status & health data with your existing data collection systems.

## Merge PCBA Product Test Data & Test Environmental Data

By collecting individual board data, PCBA test is the earliest point in the manufacturing process where there is a sufficient information to assess the status and quality of the upstream assembly process. This makes Teradyne’s TestStation Family of Testers the ideal place to begin collecting smart data including test, health & environmental data.

Capturing and analyzing PCBA product test data in real time means factories can monitor the status of the overall assembly process on a real time basis. The granularity of data collected at test (e.g., missing components or a consistent solder bridge) allows speedy identification of specific upstream assembly problems that can be fixed via human intervention.

Smart4Metrics enables you to measure and transmit test system environmental data, including internal system temperature, power supply temperature, DC power supply voltages, number of test fixtures actuations, air pressure, vacuum pressure, fan speed (RPM) and AC power consumption while system is idle or operating.

This data analysis can be performed per-tester, per-line, per-factory and even at the enterprise level while data can be stored in your existing private or public cloud.



## Features & Benefits

- Enable Data Correlation
- Failure Prediction
- Real-time fault detection
- Improve product yield
- Increase equipment availability
- Enable early intervention
- Trend monitoring
- Line to line comparisons

## Highlights

- Integrates with existing customer enterprise data collection systems
- Provide links to Collaborative Automation
- Test production data sent directly to MES with the ability to add timed tester health & status data