

SmartLine is a scalable data capture system that builds upon Solderstar's range of real-time process monitoring instruments and sensors.

SmartLine provides the network link and software for streaming of live process data from the soldering processes on the production floor.



WEB BASED DATA COLLECTION/REPORTING



Example Configuration - SMT Lines

System Walkthrough

The SmartLine system has been developed to work within the Industry 4.0 / Industrial Internet of Things concept, a principle where machines are connected through intelligent networks that can control each other autonomously to create a SMART factory.

Reflow Oven Interface

Each oven is fitted with a conveyor level temperature measurement probes, conveyor speed sensor and a measurement device. This provides independent measurement of process parameters for the reflow process. Conveyor level probes give the most comprehensive indication of process performance and fault detection.

IoT - Data Gatherer

An IoT Data Gatherer is connected to each Reflow Oven Interface where a network feed of process data is required. This unit provides TCP/IP connectivity via Ethernet or Wifi,barcoder support for data tracking by assembly ID's. Embedded Web Server technology is employed, to allow configuration via a standard Web Browser removing the need for client PC software to be installed and managed.

Big Data Interface / Web Based Reporting



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The Big Data Interface provides the data collection and distribution functions for the data generated by the IoT Data Gatherer's. The unit can be programmed to further exchange data with customer internal systems via a number of standard prototols/formats including AMQP,XML and JSON.

Data can be examined by a Web Based reporting interface, dashboards and detailed process information can be quickly examined via a web browser on any authorised PC connect to the network.



Zone Temperature Stability Analysis



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IoT - Data Gathered Web Interface

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