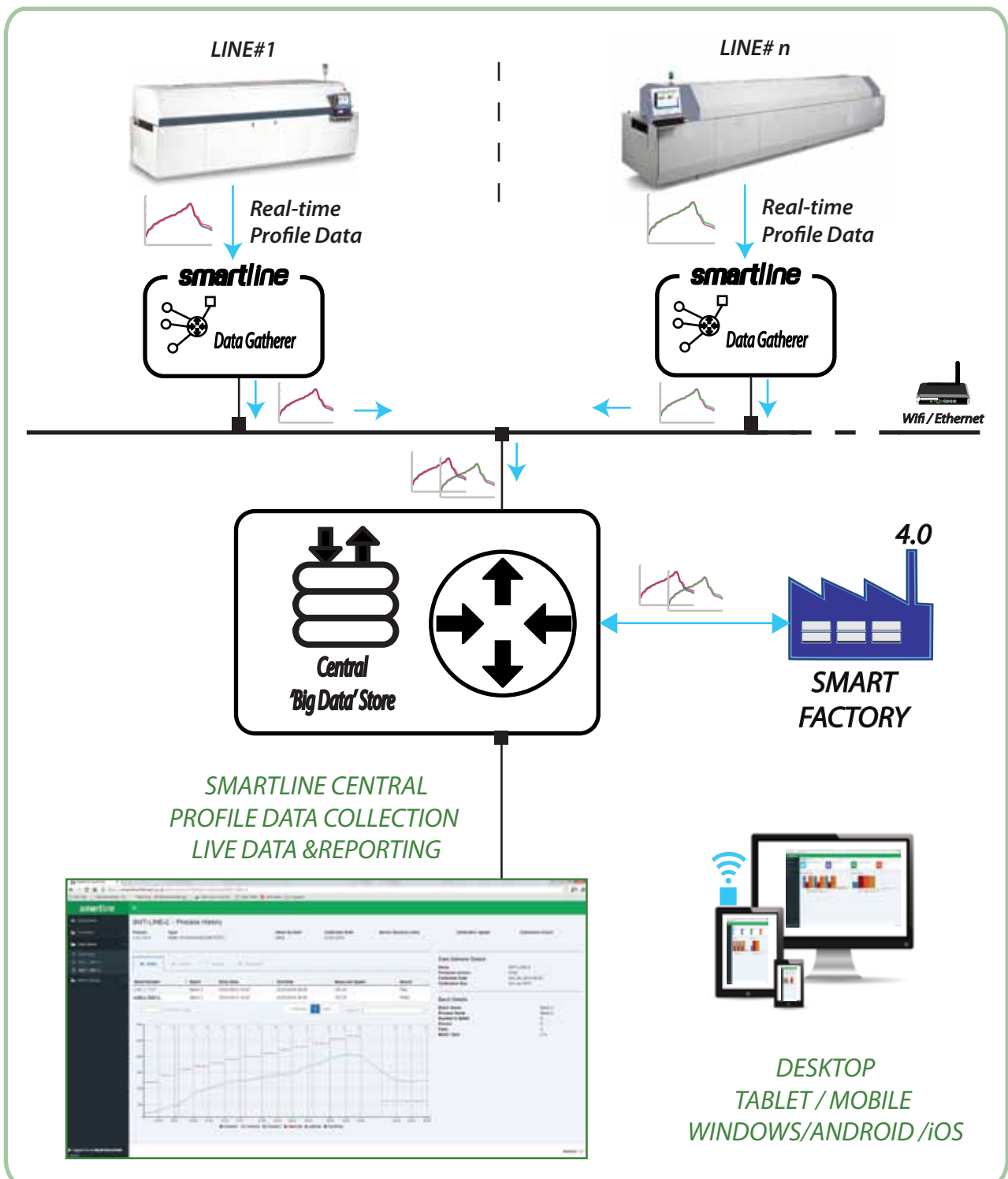# smartline

SMART FACTORY SOLUTIONS

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.
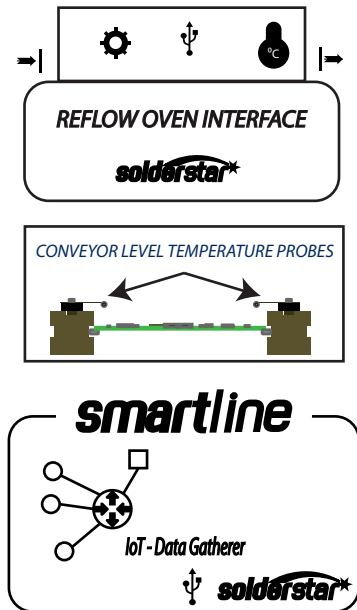
WEB BASED DATA COLLECTION/REPORTING

LINE#1   LINE# n

Real-time Profile Data

smartline Data Gatherer

smartline Data Gatherer

Wifi / Ethernet

4.0

Central 'Big Data' Store

SMART FACTORY

*SMARTLINE CENTRAL
PROFILE DATA COLLECTION
LIVE DATA &REPORTING*

*DESKTOP
TABLET / MOBILE
WINDOWS/ANDROID /iOS*

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.

REFLOW OVEN INTERFACE
solderstar*

CONVEYOR LEVEL TEMPERATURE PROBES

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.

smartline
IoT - Data Gatherer
solderstar*

Big Data Interface / Web Based Reporting

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.
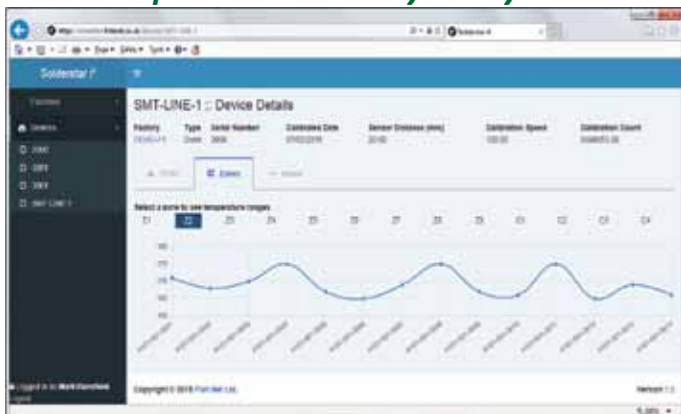
Process Overview - Dashboard

Process Data - Detail

Zone Temperature Stability Analysis

IoT - Data Gathered Web Interface

Specification subject to change without notification