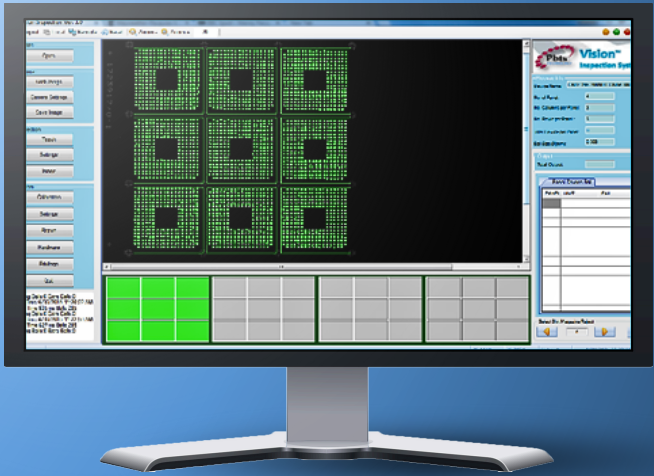TECHNICAL DATA SHEET

BALL GRID ARRAY INSPECTION SYSTEM

Integrating Sight, Enhancing Quality.

A fully integrated solution designed to perform high-precision inspections of BGA components during machine operation. Built for reliability and accuracy, the system ensures consistent quality control by automatically identifying critical defects in BGA packaging.

TECHNICAL DATA

Specification	Details
Inspection Type	Automated Optical Inspection (AOI) for BGA components
Defect Detection	Missing ball, extra ball, oversized/undersized ball diameter, ball pitch
Detection Accuracy	±10 µm (configurable based on setup)
Supported BGA Sizes	Configurable; supports standard BGA packages
Result Output	Real-time PASS/FAIL status with defect markers
Data Storage	Local and network-based logging (CSV, XML, SQL export formats)

PRODUCT INFO

The BGA Inspection System is a machine-integrated solution engineered to deliver fast, accurate, and automated inspection of BGA components during production. It detects key defects such as missing or extra solder balls, incorrect ball sizes, and misaligned ball pitch — all in real time. Designed to streamline quality control, the system automatically flags defective components with a clear PASS/FAIL output, ensuring only high-quality units proceed through the manufacturing process. Its integration into the production line minimizes downtime, enhances inspection consistency, and supports high-throughput environments where precision matters.

PRODUCT FEATURES

- Detects missing balls, extra balls, ball diameter deviations, and pitch misalignment with high accuracy.
- Provides instant inspection results based on pre-defined quality thresholds, enabling immediate response during production.
- Utilizes advanced optical technology to capture clear and detailed images of BGA components.
- Allows users to set tolerances and criteria according to specific product or customer requirements.
- Easily integrates into existing machine operations for continuous, in-line inspection without disrupting workflow.