



Multi Line Assist

AOI module for assembly processes and THT assembly



- module for integration into assembly and placement stations
- camera-based assistance system for manual production
- placement assistance via optional projection module
- permanent real-time optical inspection at the assembly station with direct feedback
- three different image field sizes and resolutions
- connection to MES systems



Customer-side assembly table with Multi Line Assist integration module

Application concept

- automatic optical inspection module with optional placement assistance
- easy integration into assembly stations

MES connection

- flexible data interfaces for MES and traceability connections
- data management and detailed error evaluation via PILOT Connect

Failure detection and assistance

- real-time optical inspection at the assembly station with direct feedback
- completeness check, position and defect detection of mounted electronic PCBAs
- presence, correct positioning, polarity and labeling (OCR) of THT components
- optional user-guided assistance for THT assembly by projecting information into the operator's field of vision



Integration module with camera unit and optional projector

Technical specifications

inspection module	camera and lighting module for integration into assembly stations or THT placement stations		
operating distance	approx. 1270 mm		
camera	47 megapixel, color		
focal length	35 mm	50 mm	75 mm
resolution	81 µm/Pixel	58 µm/Pixel	37 µm/Pixel
inspection range	660 mm x 450 mm	475 mm x 320 mm	300 mm x 200 mm
inspection speed	up to 800 cm ² /s		
maximum inspection height/ depth of field	100 mm		
dimensions integration module (W x D x H)	872 mm x 680 mm 200 mm		
module weight	20 kg		
power demand	230 VAC / 0,5 kVA		
lighting	LED lighting, illuminance on the work surface: approx. 2000 – 3500 lux		
operating system	Windows 11		