

Isee 510 2D AOI

A single-track 2D automated optical inspection configuration for boards up to 510 × 510 mm. RGB, coaxial and white lighting support visible assembly inspection, with camera and software options selected for the required inspection tasks.



Selection highlights

- Single-track transport; 510 × 510 mm maximum PCB
- 12 MP camera with 12 µm standard resolution
- SMEMA interface; configurable inspection software options

Applications to evaluate

- Visible component-placement and solder-joint inspection
- Review of offset, tombstoning and visible solder defects after programming
- Single-track PCB production where a 510 × 510 mm board envelope is required

How the configuration supports your process

Lighting for visible inspection

RGB surrounding light, coaxial light and white light provide different illumination approaches. Inspection recipes should be evaluated against reflective surfaces, component markings and the relevant defect examples.

Program-controlled transport

The single-track conveyor includes software-controlled width adjustment. The source describes three-stage stopping, with boards longer than 220 mm automatically changing to a single-stage process.

Connect inspection and review

Barcode recognition and SMEMA are listed in the equipment features. Review stations, MES connection, offline programming and SPC analysis are listed as options rather than assumed standard deliverables.

Isee 510 | Technical reference

Values below are drawn from the product documentation. Confirm the ordered configuration and installation specification before purchase.

Parameter	Documented configuration / value
Transport	Single track; fixed front track
PCB size range (L × W)	50 × 50 to 510 × 510 mm
Maximum PCB thickness	6 mm
Main camera	12 MP standard; 21 MP optional
Camera resolution	12 μm standard; 15 / 7 μm optional
Lighting	RGB surrounding + coaxial + white light
Transport clearance	Top 50 mm / bottom 50 mm
PCB bending adjustment	±4 mm
Line interface	SMEMA
Dimensions (L × W × H)	1000 × 1250 × 1600 mm
Weight	1100 kg
Power supply	AC 200-240 V, 50/60 Hz
Power consumption	1.2 kW standard / 3 kW maximum
Compressed air	0.5 MPa, 5 L/min
Control platform	Windows 10 listed in source documentation; confirm delivered software version

Package-size claims depend on the selected resolution. Confirm defect coverage through samples and an agreed acceptance procedure.

Reference: <https://vzaoi.com/en/product-155954-327398.html>

Prepared from supplied product documentation; this selection brief does not replace the agreed quotation or acceptance specification.

Plan your Isee 510 configuration

Base configuration and options

The listed configuration includes single-track transport, 12 MP imaging, 12 µm resolution and SMEMA. The delivered software and inspection scope should be confirmed in the specification.

- 21 MP camera or alternative camera resolution
- Repair / review workstation
- MES connection and SPC analysis
- Offline programming and centralized judgment
- Automatic changeover and labeling configurations

Installation and project inputs

Provide board dimensions, component information, inspection criteria and sample images or boards. Confirm conveyor height and flow direction, AC power, compressed air, network requirements and space for any selected review workstation.

Common selection questions

Should I choose Isee 510 or Isee 510D?

The 510 is a single-track configuration. The 510D has a dual-track arrangement with different listed board-width conditions; compare those limits against your line before selecting.

Are MES and SPC included as standard?

They are listed in the optional-equipment section of the source documentation. Confirm the required software modules and integration scope.

Discuss your application with JCX

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Product page: <https://jcx-smtmachine.com/product/isee-510-2d-aoi/>

Provide board dimensions, representative samples, materials where relevant, and your inspection or process acceptance criteria. Support, training and integration scope are agreed for each project.