# **High-Resolution 2D Sensor**

High Precision Optical Sensor with Enhanced Illumination

# Measure. Analyze. Improve.

CyberOptics is a leading global developer and manufacturer of high precision sensing technology solutions. CyberOptics' 2D and 3D sensors are used in SMT, semiconductor and metrology markets to significantly improve yields and productivity.

#### New 2D Sensor with Enhanced Illumination

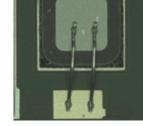
CyberOptics High-Resolution 2D Sensor provides perfect, crisp quality images at a 3µm resolution. The four independent white light LED ring light channels provide a great degree of flexibility for inspection and defect review.





**Lens Inspection - Bubble Defect** 

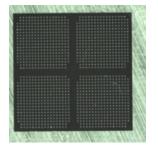


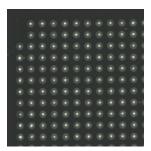


Wire Bond - High Angle

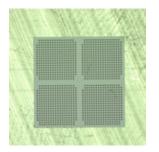
Wire Bond - Low Angle

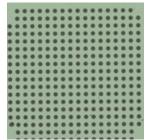






**Packaging - High Angle** 





**Packaging - Coaxial** 

#### **Metrology-Grade Accuracy at Production Speed**

See crisp, high quality images for highly accurate inspection and defect review.

#### **Superior Inspection Performance**

Attain repeatable and reproducible measurements for a variety of applications.

#### **Versatility for Various Challenging Applications**

Ideal for a wide range of applications including wire bond, advanced packaging, solder bump & ball, lens
inspection and other applications where an even greater degree of accuracy and reliability is critical.



## Intuitive, Easy-to-Use Software

CyberOptics AOI Software is a powerful yet extremely simple software designed with an intuitive interface that reduces training efforts and minimizes operator interaction – saving time and cost. The software includes multi-touch controls and image visualization tools, taking ease-of-use to a whole new level.

### Al<sup>2</sup> - Faster, Smarter Programming

Autonomous Image Interpretation (Al²) technology is all about keeping it simple - no parameters to adjust or algorithms to tune. With Al², you have the power to inspect the most comprehensive list of features and identify the widest variety of defects. Al² offers precise discrimination with just one panel inspection making it a perfect solution for high-mix and high-volume applications.



Field of View	15 x 15mm
Resolution	3 μm
Depth of Field	±250 μm
Inspection Rate	7 cm²/sec
Imaging System	Telecentric
Illumination	Four Independent White Light LED Ring Light Channels • Coaxial (90°) • High Angle (70°) • Medium Angle (50°) • Low Angle (40°)
System Specifications	
Machine Interface	SMEMA, RS232 and Ethernet

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Machine Interface	SMEMA, RS232 and Ethernet
Power Requirements	100-120 VAC or 220-240 VAC, 50/60 hz, 10-15 amps
Compressed Air Requirements	5.6 Kgf/cm² to 7.0 Kgf/cm² (80 to 100 psi @ 4 cfm)
System Dimensions	110 x 127 x 145 cm (W x D x H)
Weight	965 kg (2127 lbs.)
Ontions	

#### Option:

Barcode Reader, Rework station, SPC Software, Alignment Target

