

## News Release

# Yamaha reveals high-performance AOI option for high-density and lighting assemblies

**YRi-V HS for faster high-resolution inspection adds advanced laser profiling for LED coplanarity, debuting on Yamaha's booth 462 in Hall A3 at electronica 2024 in Munich, Germany.**

Yamaha Robotics Europe has introduced the YRi-V HS optical inspection (AOI) system with enhanced features for faster performance at high resolution and greater accuracy inspecting surface-mounted LEDs.

The new YRi-V HS configuration is for electronic manufacturers in all market sectors, from consumer to industrial and automotive, seeking greater inspection resolution with high production throughput. As circuit designers increasingly adopt components with tiny feature sizes, to deliver extra functionality and comply with tough constraints on the overall form factor, manufacturers need inspection systems with greater resolution to ensure proper quality control. On the other hand, maintaining high throughput is critical to fulfil productivity targets.



Yamaha YRi-V

The YRi-V HS now combines high inspection resolution and high throughput, to handle components such as the latest, smallest SMD chips and IC packages with fine-pitch I/Os. With its enlarged, square field of view (FOV) and 25Mpixel camera,

the YRi-V HS can image a complete assembly or selected area up to 1.6 times faster than ordinary high-resolution systems.

In addition, the new YRi-V HS integrates an advanced laser system for accurate height measurement and coplanarity checking of components such as LEDs in lighting products. Laser profiling overcomes the imaging challenges presented by the LEDs' transparent or opaque lenses, offering effective quality control for manufacturers to address LED lighting opportunities in automotive, consumer, and industrial markets. By also enabling accurate imaging of components with highly reflective surfaces, such as wafer-level chip-scale packages, laser profiling helps raise end of line yield and minimize rework.

### **About Yamaha Robotics SMT Section**

Yamaha Surface Mount Technology (SMT) Section, a subdivision of Yamaha Motor Robotics Business Unit in Yamaha Motor Corporation, produces a complete selection of equipment for high-speed inline electronic assembly. This 1 STOP SMART SOLUTION includes solder paste printers, component mounters, 3D solder paste inspection machines, 3D PCB inspection machines, flip-chip hybrid placers, dispensers, and management software.

Bringing the Yamaha way to electronics manufacturing, these systems prioritize intuitive operator interaction, efficient coordination between all inline processes, and modularity enabling users to meet the latest manufacturing demands. Group competencies in servo-motor control and image recognition for vision (camera) systems ensure extreme accuracy with high speed.

The current product line includes the latest YR equipment generation, with advanced automated features for programming, setup, and changeovers, and new YSUP management software with state-of-the-art graphics and built-in data analytics.

Combining design and engineering, manufacture, sales, and service competencies, Yamaha SMT Section ensures operational efficiency and easy access to support for customers and partners. With regional offices in Japan, China, Southeast Asia, Europe and North America, the company provides truly global presence.

[www.yamaha-motor-robotics.eu](http://www.yamaha-motor-robotics.eu)