

## In-Line Inspection

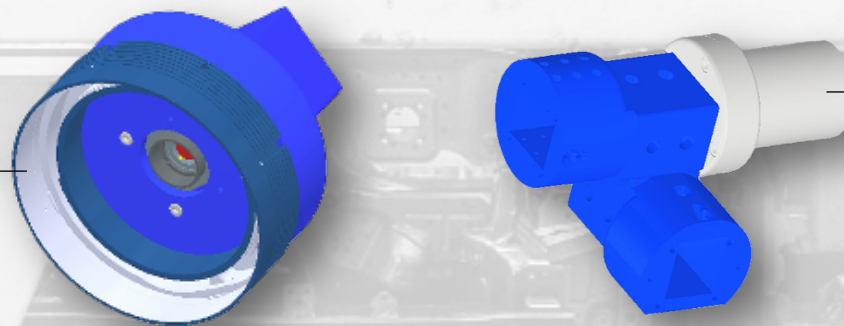
LM3 Technologies' **in-line inspection solutions** seamlessly integrate into existing production lines, providing **real-time quality control** and **defect detection**. These systems utilize **advanced vision technologies**, ensuring **precise and continuous monitoring** of parts and assemblies without disrupting throughput, improving **efficiency** and reducing **scrap and rework costs**.

**PAQi Controller Unit**  
The central processing hub for real-time AI analysis and data management.



**Breakout Box**  
Facilitates organized and efficient connections for cameras, lighting, and system control.

**Cameras with Housing**  
High-resolution imaging devices securely mounted for stable and consistent capture.



**Adjustable Lighting**  
Optimized illumination to highlight defects and ensure accurate inspection under varying line conditions.

### Technical Capabilities

- **High-Speed Inspection:** Capable of analyzing thousands of parts per hour with precision.
- **Seamless Integration:** Interfaces with PLCs and factory networks using standard industrial protocols.
- **Defect Detection:** AI-powered models identify defects, validate presence, and ensure dimensional accuracy in real time.
- **Lighting Optimization:** Adjustable RGBW lighting ensures consistent imaging across varying part materials and conditions.
- **Scalability:** Modular design accommodates additional cameras or sensors for expanding inspection needs.
- **Data Storage and Traceability:** Logs inspection data for traceability and continuous improvement.



Automotive



Medical



Electronics



Molding

Assessment and Planning

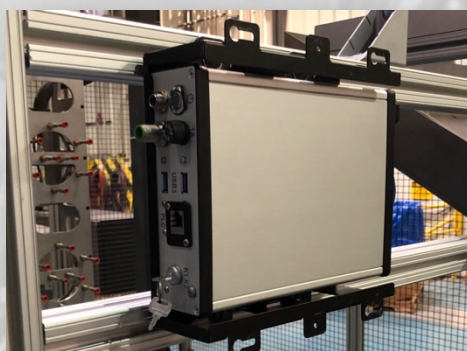
System Design

Hardware Installation

System Integration

Image Collection & AI Training

Validation and Deployment



### Advantages

- **Real-Time Accuracy:** Detects defects instantly, minimizing downtime and production waste.
- **Improved Efficiency:** Eliminates manual inspections, accelerating throughput without compromising quality.
- **Customizable Design:** Tailored configurations meet diverse production line requirements.
- **Cost Savings:** Reduces scrap, rework, and labor costs.
- **Fast and Easy:** Easily attaches to existing production processes for easy inspection setup.