



REVOLUTIONIZING PROCESS CONTROL & NON-DESTRUCTIVE TESTING

What is Flir A6450?

The Flir A6450 is the next-generation cooled MWIR camera designed to transform automation and quality assurance.

Building on industry-standard electronics, the A6450 combines scientific-level performance with a revolutionary long-life cooler, enabling scalable, reliable, and precise process control.

Traditional cooled thermal inspections are often costly to maintain and difficult to integrate—requiring frequent service and complex sub-system communication.

Scaling automation programs with traditional cooled cameras is historically a barrier due to maintenance downtime; failing to modernize results in poor quality products and higher labor costs.

Flir A6450 solves these challenges with a high-sensitivity, plug-and-play platform that simplifies integration, standardizes quality, and scales effortlessly across manufacturing lines.

With Long-life Cooled Thermal Imaging



27,000 Hours The industry-leading cooler life significantly reduces maintenance burdens compared to traditional cooled cameras, opening doors for 24/7 automation.



Designed for continuous operation, the A6450 minimizes costly production stops and reduces the risk of uneven quality control in manufacturing environments.

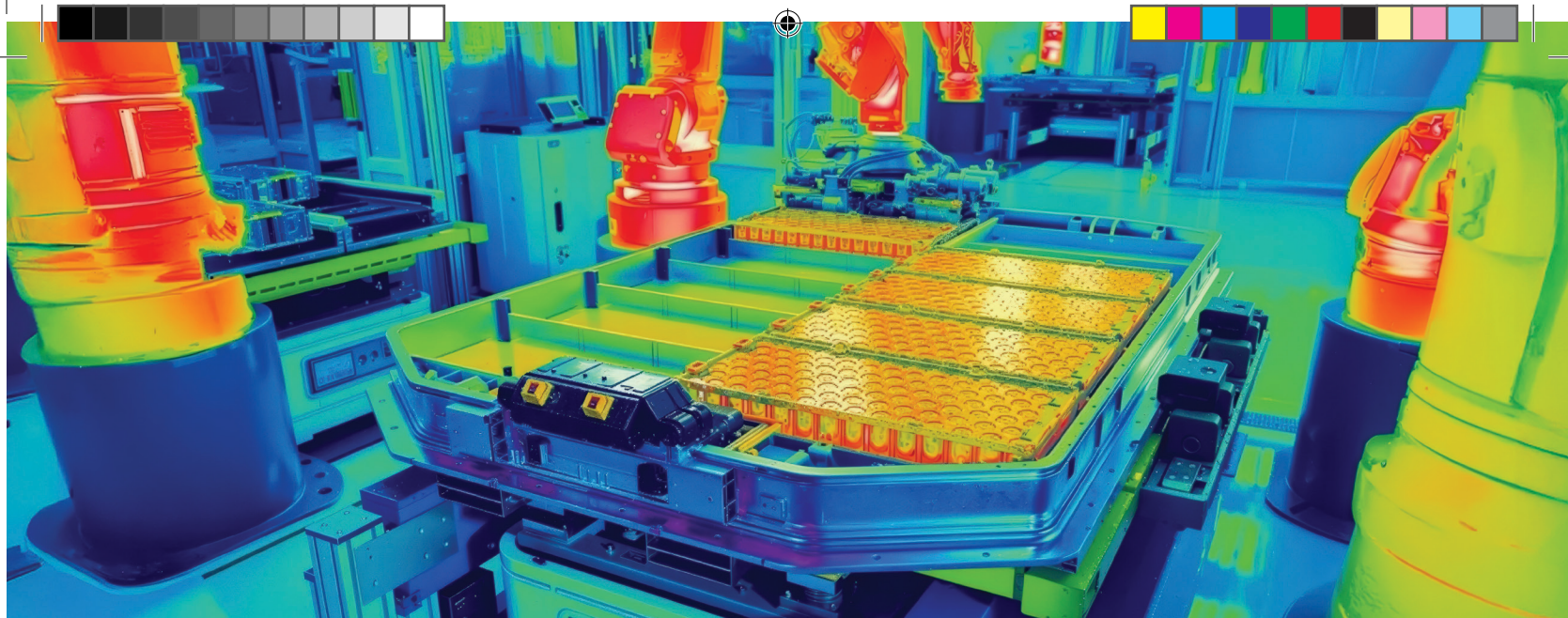


125 Hz High-speed frame rates allow for the capture of fast-moving targets and events without motion blur, ensuring precision in non-destructive testing.



Zero Glitch Built on industry-standard Flir A6700 electronics, the A6450 solves complex communication issues with glitch-free GigE Vision and GenICam implementation.





Key Values

Simplify and Speed Up Integration

Designed for machine builders and integrators, the A6450 utilizes simple standard GigE Vision and GenICam protocols. This “plug and play” capability with industry-leading Research Studio software allows for immediate testing before implementation, simplifying the workflow from development to the factory floor.

Support 24/7 Automated Operations

The timing and cost of routine maintenance for cooled cameras have historically been major pain points. The A6450 features a revolutionary HOT MWIR detector with a linear cooler life of 27,000 hours, drastically reducing maintenance downtime and supporting continuous, round-the-clock production.

Solve Complex Quality and Speed Challenges

There is a solution for fast-moving targets! The A6450 offers a 125 Hz frame rate and exceptional thermal sensitivity, allowing it to detect small thermal variations on high-speed lines. This capability solves “buyer pain points” regarding poor quality control and dangerous failures in designed automation systems.

Key Applications

Non-Destructive Testing (NDT)

- **Ideal for battery testing and aircraft material parts inspection**
- **Offers high sensitivity to detect minute defects**

Manufacturing & Process Control

- **Ideal for industrial manufacturing, food & beverage, packaging, and pharmaceutical seal quality inspection**
- **Accurately measures temperatures on moving products to reduce risk and labor costs**

Machine Vision

- **Ideal for electronics inspection and medical equipment manufacturing**
- **Accurately monitors high-speed, high-precision situations where thermal data is critical**

Flir A6450 Specifications

Detector: Revolutionary HOT MWIR
Cooler Life: 27,000 + hours
Frame Rate: 125 Hz
Connectivity: GigE Vision, GenICam, Spinnaker, SDK
Software Compatibility: Flir Research Studio



Scan the code to learn more about the Flir A6450

