

# INSTALLATION REQUIREMENTS

Factbird® EDGE - AI Visual Counter

## Before You Begin

### When Factbird AI Visual Counter is the right solution

- **Products lack clear batch separation** - when multiple products or product variations flow continuously without clear batch separation.
- **Products are not in single file** - when items do not align in a single lane, making laser or beam-break counters ineffective.
- **Challenging product surfaces** - reflective, glossy, transparent, or irregular surfaces that can interfere with laser-based sensors.
- **Laser counter limitations** - when physical layout, product geometry, or environmental conditions prevent accurate laser counting.

### Important note

The AI Visual Counter requires training on images of the customer's products, and this process may involve several rounds of validation and model improvement. The customer must **appoint a dedicated contact person** to coordinate feedback and communication throughout the project.

## Process Overview

Steps	What will happen
1. Confirm solution fit	Confirm that visual counting is the right fit.
2. Install hardware	Install the camera and Factbird EDGE
3. Data validation & AI model improvement	<p>Customer provides to Factbird:</p> <ul style="list-style-type: none"><li>• A list of all products and formats that appear on the production line.</li><li>• Counting rules for each product - specifying whether different products should be counted together or separately.</li><li>• A timetable indicating when each product or format appears in the video stream. Note: If the timetable is provided in the customer's local time, please specify the time zone.</li></ul> <p>Factbird creates a tailored AI counting model. The model is tested and validated using real production data.</p>

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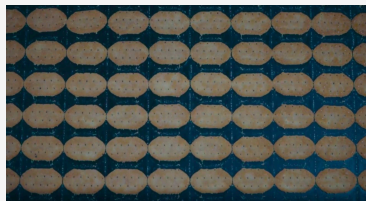
### Choosing a suitable camera

- Consider the operating environment (e.g., temperature, humidity, dust levels, washdown requirements), noting that the price will vary depending on the required protection level.

Note: For information on standard camera models, please contact Factbird.

### Camera installation conditions

- **Clear line of sight** - The camera must have an unobstructed view of the counting area. A top-down perspective provides the best results.



- **Stable mounting position** - The camera must remain fixed after installation; any movement may require retraining and redeployment.
  - Common issue: Camera displacement during cleaning procedures.
- **Consistent lighting** - Ensure stable illumination throughout the production day. Avoid direct sunlight, reflections, or flickering lights.
- **Minimal vibration** - Mount the camera on a stable surface, ensuring it is not exposed to excessive machinery vibration.
- **Lens protection from obstruction** - Protect the lens from steam, grease, flour dust, and condensation when applicable.
  - Common issue: Lens obstruction caused by cleaning procedures.

### Suitable product flow on the production line

- **Reasonable product spacing/overlap** - A small gap between items as they pass through the counting zone is ideal. A certain degree of overlap can be supported and will be assessed case by case.
- **Product/background contrast** - Ensure clear contrast between the objects being counted and the background to maximize performance.
- **Moderate conveyor speed** - Products must not move so quickly that they cause motion blur or exceed the model's processing capability.

### Factbird® EDGE installation condition

- Factbird® EDGE must not be exposed to water, dust, chemicals, or other contaminants. Please refer to the datasheet.

### NOTE

Any changes to the installation conditions specified in this document that necessitate model retraining will be billed as additional services and are not covered under standard Factbird support agreements.