

BASLER ACE STEREO CAMERA

109523

Basler Stereo - STA-300-547M-082625-W, GigE
Interface, 3-10 fps, 300mm, Mono

- Multiple baseline options
- Colour or Monochromatic
- Minimal Latency



PRODUCT DESCRIPTION

The **Basler Stereo ace** series comprises robust industrial stereo cameras that deliver high-resolution active 3D imaging with minimal latency, ideal for pick-and-place, bin picking, logistics, and factory automation tasks. Each model includes an integrated high-performance pattern projector and factory calibration with ongoing dynamic self-calibration routines, ensuring stable depth measurement even on low-texture or glossy surfaces. The system triangulates stereo images using the SGM method to produce depth maps, point clouds, and confidence images, all in real time. Available baseline options of 100 mm, 200 mm, and 300 mm, plus both colour and monochrome sensor variants, offer flexibility depending on measurement volume and detail. For instance, the STA-100-547C-082609-W variant features a 2472 × 2064 px global-shutter GigE sensor with depth accuracy ranging from 0.10 mm at 0.6 m to 1.13 mm at 2 m, covering workspaces from ~430 × 440 mm to ~1677 × 1475 mm. Powered via M12 24 V DC and outputting data through dual RJ45 connectors, these cameras are fully GenICam and pylon SDK compliant and support ROS and Aravis, facilitating seamless integration into automated systems.

On the software side, **Stereo ace** models benefit from Basler's pylon "Stereo Supplementary Package" and 3D Camera Cube modules, offering plug-and-play compatibility and easy commissioning. Through these tools, users can tap into application-specific 3D software modules, such as those for robot guidance, quality assurance, and volume estimation, directly via the camera's web interface or standard SDKs. Practical implementations include guiding robotic arms for accurate object retrieval in logistics, verifying dimensions on conveyor lines, and inspecting reflective auto parts in automotive manufacturing. A highlight reel from Logimat 2025 demonstrates the system's accuracy and flexibility in handling real-world industrial scenarios. With its combination of high precision, industrial-grade housing, and strong developer support, Stereo ace stands out as a dependable choice for advanced machine-vision applications in harsh operational environments.

TECHNICAL DATA

Baseline	300 mm
Interface	GigE
IP class	IP50
Mono/color	Mono
Operating system	ARM Linux (AArch64), Linux, Windows
Resolution	2472 px × 2064 px
Shutter type	Global
Type	Stereo Vision
Weight	1.8 kg
Working Range	1.1 m - 5 m

