

# BUMBLEBEE® X

Industrial Stereo Vision Cameras | BX-P5G-30C-XC3/5/7 | BX-PGE-30C-XC3/5/7

## KEY FEATURES

### High Accuracy Wide Baseline

Factory calibrated 24 cm baseline stereo vision with 3 MP sensors for high accuracy.

### Onboard Processing

Onboard processing to output a depth map and color data for point cloud conversion and colorization.

### Low Latency

The low latency makes it ideal for real-time applications such as autonomous mobile robots, automated guided vehicles, pick and place, bin picking, and palletization.

### Industrial Grade

IP67 industrial rated vision system with ordering options of color and monochrome, different field-of-views, and 1GigE or 5GigE PoE.

### Spinnaker® 3D

Software library with articles, example code and Windows, Linux, and Robotics Operating System (ROS) support.

## APPLICATIONS

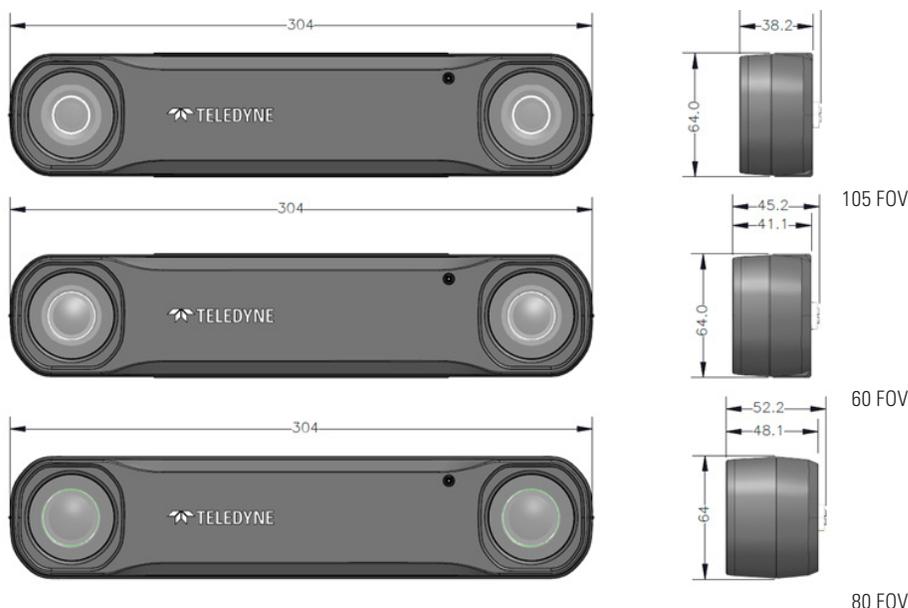
- **Robotic Arm**
  - Bin picking
  - Palletization
  - Pick and place
- **Robot navigation**
  - Autonomous mobile robot (AMR)
  - Automated guided vehicle (AGV)

SCAN FOR MORE INFO



## High Accuracy Depth Sensing

Bumblebee X® and software Spinnaker® 3D offers a comprehensive industrial grade (IP67) stereo vision solution with onboard processing to build successful systems for warehouse automation, robotics guidance, and logistics. The camera is designed to operate accurately across varying distances. Customers can test and deploy depth sensing systems that work up to ranges of 20 meters with the wide baseline solution.



**SPECIFICATIONS (Preliminary and subject to change)**

		BX-P5G-30C-XC3	BX-P5G-30C-XC5	BX-P5G-30C-XC7	BX-PGE-30C-XC3	BX-PGE-30C-XC5	BX-PGE-30C-XC7
Megapixels		3 MP					
Sensor		Sony Pregius CMOS, 1/1.8"					
Readout		Global shutter					
Pixel Size		3.45 µm					
Chroma		Color					
Interface		5 GigE PoE			1 GigE PoE		
Working Distance		0.5 m to 20 m					
Field-Of-View*		60° (H) x 50° (V)	80° (H) x 60° (V)	105° (H) x 90° (V)	60° (H) x 50° (V)	80° (H) x 60° (V)	105° (H) x 90° (V)
Depth Accuracy*	1 m	1 mm (0.1%)	2 mm (0.2%)	3 mm (0.3%)	1 mm (0.1%)	2 mm (0.2%)	3 mm (0.3%)
	2 m	4 mm (0.2%)	7 mm (0.35%)	15 mm (0.75%)	4 mm (0.2%)	7 mm (0.35%)	15 mm (0.75%)
	5 m	25 mm (0.5%)	42 mm (0.85%)	89 mm (1.8%)	25 mm (0.5%)	42 mm (0.85%)	89 mm (1.8%)
Power Requirements		Power over Ethernet (PoE), 10-24V via GPIO					
Power Consumption		14.5 W					
Connector Type		M12 X-coded 8-pin for ethernet, 12-pin GPIO					
Mounting		¼"-20, M4					
Baseline		24 cm					
Pre-Calibrated		Yes					
Stereo Processing		On-board disparity processing at 15 fps (TBC)					
OS Support		ROS 1 & 2, Linux, Windows, ARM					
I/O		GPIO (4x non-isolated GPIO, 1x isolated input, 1x isolated output)					
Synchronization		IEEE 1588 PTP					
Machine Vision Standard		GigE Vision v2.0					
Dimensions		304 x 64 x 41 mm	304 x 64 x 48 mm	304 x 64 x 38 mm	304 x 64 x 41 mm	304 x 64 x 48 mm	304 x 64 x 38 mm
Mass		~900 g					
Protection		IP67					
Compliance		CE, FCC, RoHS					
Temperature		Operating: -10° to 50°C Storage: -30° to 60°C					
Humidity		Operating: 20 to 80% (no condensation) Storage: 20 to 95% (no condensation)					

\* Tentative accuracy. Final data on accuracy will be updated in July 2024

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