

USB

Item	Specifications
Feature	Receives the command controlling the module from the host and sends back the detection result info
System	USB 2.0 (CDC class used)
Protocol	Non-procedural
Data format	Start: 1 bit, Data: 8 bit, Stop: 1 bit, no parity
Supported OS	Windows 7, 32 bit (refer to website for other versions) https://plus-sensing.omron.com/product/B5T-007001/

Image Sensing Functions

Function	Output	Details
Human Body Detection, Face Detection, Hand Detection	Number of detected objects	Maximum of 35 per object type
	Position (center coordinates)	Coordinates on the screen from the top-left corner of the screen (in pixels)
	Size	Pixel size on the input image
	Degree of confidence	Confidence in the detection result (0 to 1000), a higher value indicates a higher confidence
Face Direction Estimation	Yaw angle	Positive to the right (in degrees)
	Pitch angle	Positive upwards (in degrees)
	Roll angle	Positive clockwise (in degrees)
	Degree of confidence	Confidence in the estimation result (0 to 1000), a higher value indicates a higher confidence
Gaze Estimation	Yaw angle	Positive to the right (in degrees)
	Pitch angle	Positive upwards (in degrees)
Blink Estimation	Blink degree	Output for both eyes (1 to 1000), a higher value indicates the eye is closer to being fully shut
Age Estimation	Age	0 to 75 (75 includes higher ages)
	Degree of confidence	Confidence in the estimation result (0 to 1000), a higher value indicates a higher confidence
Gender Estimation	Gender	Male or female
	Degree of confidence	Confidence in the estimation result (0 to 1000), a higher value indicates a higher confidence
Expression Estimation	Score for 5 expressions	0 to 100 The score will be output for each expression ("neutral", "happiness", "surprise", "anger" and "sadness"). The score indicates the likeliness of a face displaying the estimated expression, where a higher score indicates a higher likeliness of being that expression.
	Expression degree (positive or negative)	+100 to -100 A degree closer to +100 indicates a high degree of "happiness" while a degree closer to -100 indicates a high degree of "surprise", "anger" or "sadness".
Face Recognition	Individual identification result	Displays either the registered User ID, or "non-registered" for non-registered individuals Maximum number of users: 100 Maximum number of data per use: 10 Registration is done with the Product.
	Score	Matching degree (0 to 1000) The result of the user with the highest matching degree is output. A degree closer to 1000 indicates a higher likeliness of being that user

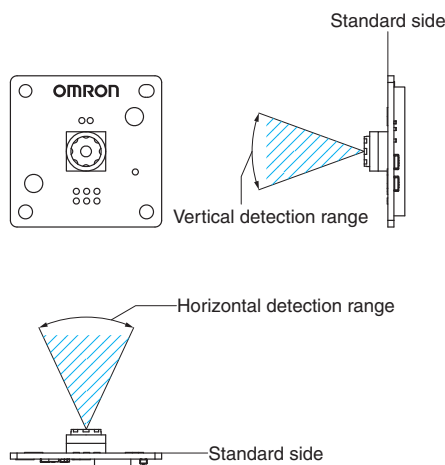
Degrees of confidence are grain size 1. Angles are for when facing the camera.

■ Image Input Specification Item Definitions

Horizontal and Vertical Detection Range (angles of view)

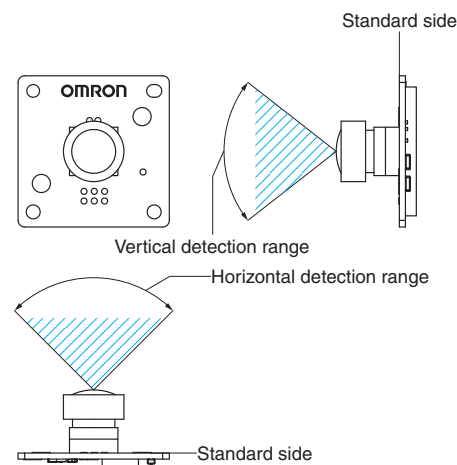
Horizontal angle of view 50°

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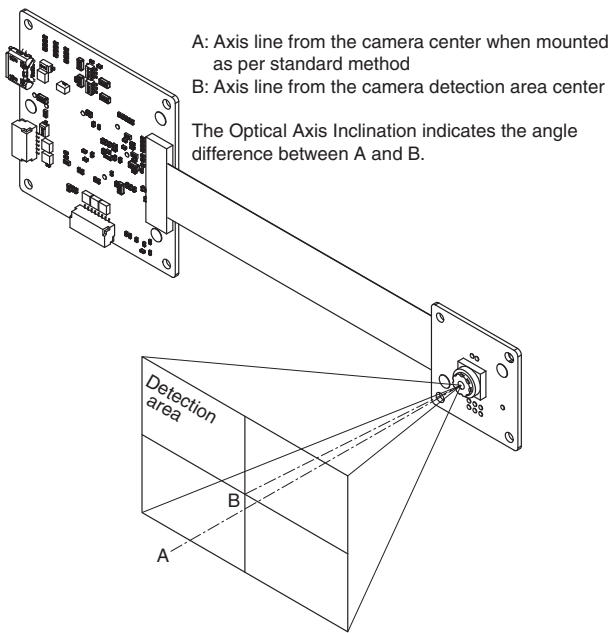


Horizontal angle of view 90°

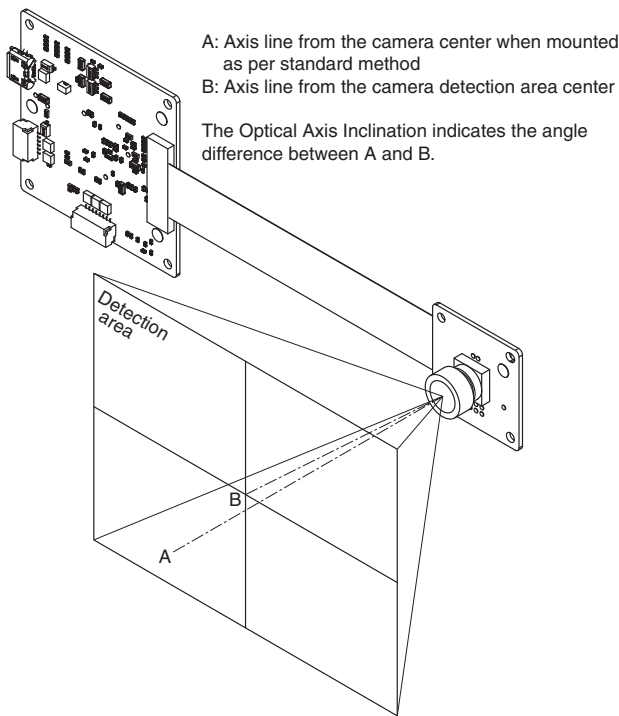
B5T-007001-020



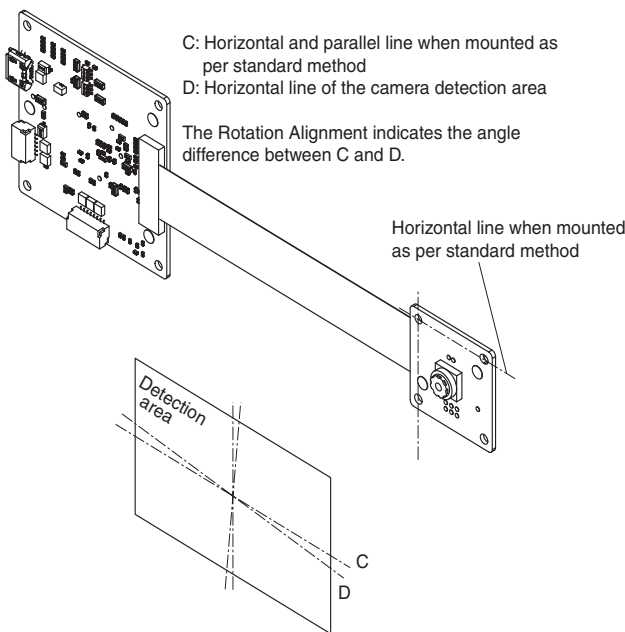
Optical Axis Inclination
Horizontal angle of view 50°
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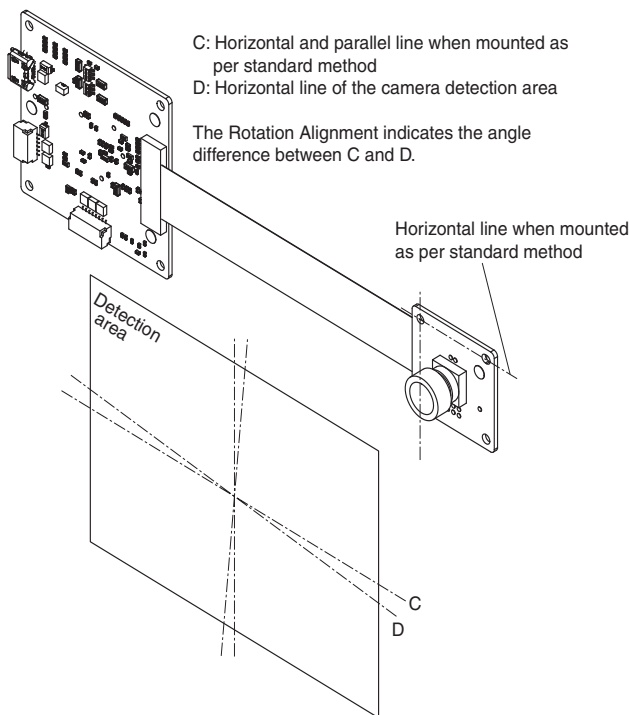
Horizontal angle of view 90°
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Rotation Alignment
Horizontal angle of view 50°
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Horizontal angle of view 90°
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