	3D laser sensor	Stereo sensor
Working distance (mm) *	100	250、400
/iew area (mm) * 38 × 29 ~ 99 × 74, 3types		120 × 90 ~ 290 × 230, 4types
Laser class	Slit type 2 projector, class 2	-
LED lighting	High intensity red lamp, 4pcs	High intensity red lamp, 4pcs
Dimension (mm) W129 × H110 × D122		W210 × H110 × D49
Mass (g)	about 950	about 1,260

\* Contact us for a special type of sensor.

	LSC standard	LSC wide
Working distance (mm) *	1,400 ~ 2,000	1,700 ~ 3,500
Measurement area (mm) *	W800 × H600 × D800	W1,400 × H1,800 × D1,400
Laser class	Class 3R	Class 3R
Dimension (mm)	W610 × H125 × D125	W1,100 × H125 × D125
Mass (kg)	about 4.8	about 6.5

\* Contact us for a special type of sensor.

#### Vision Processing Unit K-HIPE-R-PC

#### Features

- PC-based type
- Fast recognition by multi-core CPU
- Selectable memory media, HDD or SSD
- Connect multiple cameras or sensors
- Connect to various equipment via Ethernet, DeviceNet, Serial I/O, or Parallel I/O
- Available 0.3 ~ 5 mega-pixel GigE camera and camera link



### Kawasaki Robot



- For those persons involved with the operation / service of your system, including Kawasaki Robot, they must strictly observe all safety regulations at all times. They should carefully read the Manuals and other related safety documents.
- Products described in this catalogue are general industrial robots. Therefore, if a customer wishes to use the Robot for special purposes, which might endanger operators or if the Robot has any problems, please contact us. We will be pleased to help you.
- Be careful as Photographs illustrated in this catalogue are frequently taken after removing safety fences and other safety devices stipulated in the safety regulations from the Robot operation system.



ISO certified in Wixom, Michigan U.S.A.

## Kawasaki Robot Kawasaki Vision System

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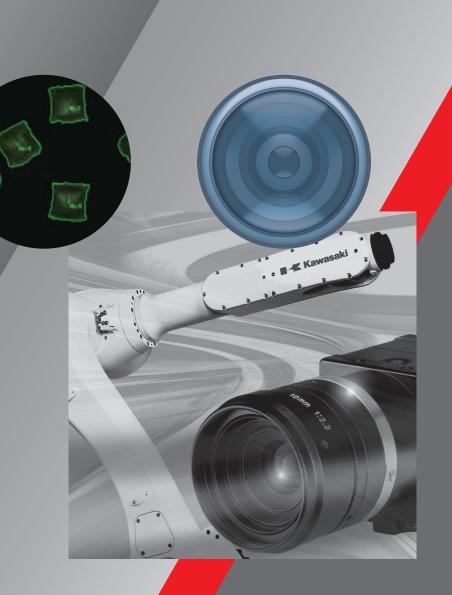
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#### KawasakiRobotics.com







### High performance vision system, applied to various usages flexibly and immediately.

**Configuration Example** 

Light

Camera

cable

Camera

Kawasaki's vision system is a multi-function, high speed, and high precision visual sensing system that can be used on a wide range of sites. Adopting a Kawasaki vision system requires no workpiece positioning and the initial setup is simple.

#### 2D vision system

**Recognition module** 



#### Features

- Fast and accurate recognition
- Pattern matching, binarization, and color recognition processing
- Recognition of various objects (shapes and colors)
- Inspection, discrimination of both sides
- Easy operation

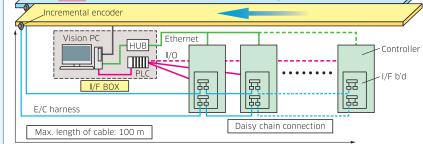
#### **Distribution module**



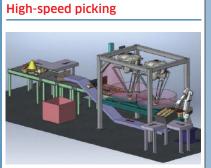
#### Features

• Work is distributed between multiple robots (max. 8), based on vision findings

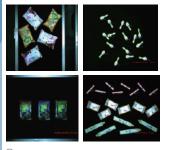
### SOOL / P Model registration Measurement result YF003N YF003N YF003N

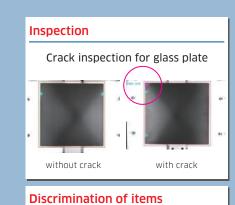


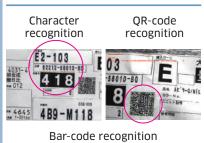
#### Application



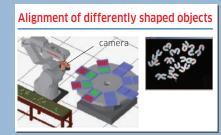




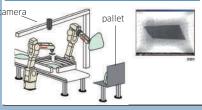




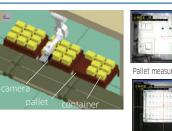




Glass picking



Palletizing and depalletizing



Container measur

#### 3D vision system



#### Features

3D laser

- Kawasaki's original 3D laser sensors can be adjusted based on content and required level of accuracy
- System isn't susceptible to lighting changes and object surface conditions
- Select the view area according to usage for the 3D laser sensor (2 or 1 laser slit type)
- The stereo sensor's working distance and view area can be modified based on usage
- Detectable by only standalone camera through wide area (LSC)
- Online interference check function for bin picking applications

# Application Bumper picking system itereo sensor Sealing system camera Body measurement

Example



3D sensor lineup		(Kawasaki Original Equipments	
Name	3D laser sensor	Stereo sensor	Laser slit scan camera (LSC)
Externals	Narrow view	Middle view	Wide view
Feature	Hole center, space difference, and gap measurement (Gray image)	3D-mesurement of registration pattern (Gray image)	High density 3D-measurement of work area (Distance image)
Usage	Measurement• inspection, Position correction	Parts picking, Position correction	Bin-picking, Environment recognition (interference avoidance)

