K-HIPE-R-PC
(PC-based image processing device for Kawasaki vision systems)

K-HIPE-R-PC4
(for automobile industry)
Dimensions: 173(W)x254(H)x396(D) mm
Power requirements: 85-264V, 220W
Ambient temperature: 0-40°C

K-HIPE-R-PC5
(for duAro)
Optional item dedicated to duAro

K-HIPE-R-PC6
(for general-purpose robots)
Dimensions: 149(W)x257(H)x224(D) mm
Power requirements: 85-264V, 220W
Ambient temperature: 0-40°C

Materials and specifications are subject to change without notice.

CAUTIONS TO BE TAKEN TO ENSURE SAFETY

- 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.

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https://robotics.kawasaki.com/
2D Vision system

K-VFinder

- Based on our know-how accumulated over many years, the Kawasaki vision system comes with all the functions necessary for robot applications. When implementing the system, no complicated setup is needed to communicate with Kawasaki robots.
- Pattern matching and binary-based measurements can be combined and defined easily. The system comes with an adjustment-assistance function and a user-friendly manual, enabling even vision-processing beginners to use the system without difficulty.
- In addition to positional measurements, the system can also handle applications such as character recognition and inspections. (Please consult Kawasaki.)

**Application examples**

1. **Positional measurement and calibration of workpieces using a fixed camera or hand camera**

   Picking of workpieces on a pallet after positional measurement

2. **Positional measurement and calibration of workpieces held by a robot, using a fixed camera**

   Inclination measurement using a camera attached to the robot hand

3. **Picking by several robots that are synchronized with a conveyor**

   Several robots pick up workpieces that are continuously transported on a conveyor

Calibration of inclination angle by positional measurement of the workpiece.

**Commericially available vision systems**

- The robot controller is equipped with a TCP/IP communication function, and can connect with various commercially available 2D vision systems.
- Since communication programs can be created according to the vision manufacturers’ specifications, customization is possible.

   Connection examples: Keyence (CV-X), Panasonic (PV), Cognex (In-Sight EZ)

3D Vision system

K-VStereo

- Initial adjustment work is drastically reduced thanks to suitable robot application packages.
- High-speed recognition is possible using dedicated vision equipment.

**Picking of bulk stacked food ingredients of indeterminate shape**

- Bulk stacking of food ingredients of indeterminate shape is possible.
- Registration of workpieces needs no special skills thanks to the original workpiece registration method.

**Specifications**

<table>
<thead>
<tr>
<th>Measurement range</th>
<th>1,100mm x 1,100mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distance to object</td>
<td>1,900mm - 3,700mm (distance from top of workpiece)</td>
</tr>
<tr>
<td>Processing speed</td>
<td>less than 1 second (processing time fluctuates depending on the object)</td>
</tr>
<tr>
<td>Resolution of Z</td>
<td>±0.5mm to ±1.2mm (varies with distance to the object)</td>
</tr>
<tr>
<td>Resolution of XY</td>
<td>±0.5mm to ±1.2mm (varies with distance to the object)</td>
</tr>
</tbody>
</table>

**Features**

- Registration of the target workpiece is not necessary. Automatic recognition is possible with only dimensional information of the workpiece from outside.
- Other Kawasaki 3D vision systems

**Depalletizing of cardboard and paper bags**

- Since communication programs can be created according to the vision manufacturers’ specifications, customization is possible.
- Communication programs can be created according to the vision manufacturers’ specifications, customization is possible.

Features

- Our original 3D sensor is unaffected by the intensity of ambient illumination and surface conditions of the workpiece.
- Sensor specifications such as the field of vision can be changed according to the application.