You can now connect a vision system to your XSEL controller with ease.

1. Supporting leading vision systems that can be connected directly
   You can use high-functional vision systems from manufacturers specialized in vision systems, such as Omron, Keyence and Cognex. Camera can capture up to 5 mega pixels.

2. No need for complex communication programs
   Coordinates read by the camera are stored as position data in the robot controller according to dedicated commands. You don’t need any complex communication programs.

3. Easy adjustment (calibration)
   Robot coordinates and camera coordinates can be aligned (calibrated) easily on the dedicated screen of your PC software.

4. Choice for affixing the camera
   The camera can be mounted either directly to the robot or to an external location.
Examples of vision system models

<table>
<thead>
<tr>
<th>Manufacturer</th>
<th>Model</th>
<th>Interface</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cognex</td>
<td>In-Sight5000 series</td>
<td>Ethernet</td>
</tr>
<tr>
<td>Omron</td>
<td>F210-C10</td>
<td>FZ3</td>
</tr>
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<td></td>
<td>CV2000</td>
<td>CV3000</td>
</tr>
<tr>
<td>Keyence</td>
<td>CV5000</td>
<td>XG-7000</td>
</tr>
</tbody>
</table>

**IAI Equipment Needed to Connect a Vision System**

- XSEL-P/Q controller
  (Main application firmware version 1.05 or later)
- Ethernet board
  (Optional --- Required if Ethernet is used for communication between the vision system and XSEL)
- XSEL controller PC software
  (Version 7.06.08.00 or later)

**Application**

Randomly oriented parts are picked up from a tray and placed in a box.

**System Configuration (Example of Wiring with Omron’s Vision System FZ3)** *Contact IAI for details.*

![Diagram of system configuration](image)