IRB 660
Industrial Robot

MAIN APPLICATION
Material handling
Palletizing

- Best throughput in class by high speed and payload
- Reach covering large palletizing cells
- Integrated double air, power and fieldbus communication
- Durable even in tough environments - IP 67

The IRB 660 is a dedicated palletizer that blends speed, reach and payload like no other robot on the market. This is an exceptionally fast 4-axis machine that combines a 3.15 meter reach with a 250 kg payload, making it ideal for palletizing bags, boxes, crates, bottles and more.

The IRB 660 is considerably faster than its predecessor. Its optimized motor power and motion performance ensure significantly shorter cycle times than competing products.

The new palletizer comes in a high-speed version capable of handling 180 kg payloads at full speed, and as a 250 kg version for high throughput.

The robot’s impressive reach means it can service up to four in-feed conveyors, two pallet stacks, one slip-sheet stack and four palletizing out-feeding lines. In fact, the IRB 660 has the versatility, reach and handling capacity to meet the demands of just about any palletizing applications.

The IRB 660 has a robust design suited for palletizing. The power, signals and field bus communication up to the wrist is integrated and well protected. Furthermore, the robot’s rugged design and IP 67 tightness make for steady performance in even the toughest environments. As well as ensuring those extra lengthy service intervals!
**SPECIFICATION**

<table>
<thead>
<tr>
<th>Robot versions</th>
<th>Handling capacity</th>
<th>Reach</th>
</tr>
</thead>
<tbody>
<tr>
<td>IRB 660-180/3.15</td>
<td>180 kg</td>
<td>3.15 m</td>
</tr>
<tr>
<td>IRB 660-250/3.15</td>
<td>250 kg</td>
<td>3.15 m</td>
</tr>
</tbody>
</table>

Number of axes: 4
Protection class: IP 67
Mounting: Floor mounted

**PERFORMANCE**

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Position repeatability</td>
<td>0.05 mm</td>
</tr>
<tr>
<td>Path repeatability</td>
<td>0.25 mm</td>
</tr>
</tbody>
</table>

**Axis movements**

<table>
<thead>
<tr>
<th>Axis no.</th>
<th>IRB 660-180/3.15</th>
<th>IRB 660-250/3.15</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>130°/s</td>
<td>95°/s</td>
</tr>
<tr>
<td>2</td>
<td>130°/s</td>
<td>95°/s</td>
</tr>
<tr>
<td>3</td>
<td>130°/s</td>
<td>95°/s</td>
</tr>
<tr>
<td>6</td>
<td>300°/s</td>
<td>240°/s</td>
</tr>
</tbody>
</table>

**MAX VELOCITY**

**ELECTRICAL CONNECTIONS**

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply voltage</td>
<td>200-600 V, 50/60 Hz</td>
</tr>
<tr>
<td>Power consumption</td>
<td>ISO-Cube 2.7 kW</td>
</tr>
<tr>
<td>Standard cycles</td>
<td>3.2 kW</td>
</tr>
</tbody>
</table>

**PHYSICAL**

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Robot base</td>
<td>1136 x 850 mm</td>
</tr>
<tr>
<td>Weight</td>
<td>1650 kg</td>
</tr>
</tbody>
</table>

**ENVIRONMENT**

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ambient temperature</td>
<td>0°C to +50°C</td>
</tr>
<tr>
<td>Relative humidity</td>
<td>Max 95%</td>
</tr>
<tr>
<td>Noise level</td>
<td>Max 73 dB (A)</td>
</tr>
<tr>
<td>Safety</td>
<td>Double circuits with supervision, emergency stops and safety functions, 3-positions enable device.</td>
</tr>
<tr>
<td>Emission</td>
<td>EMC/EMI-shielded</td>
</tr>
</tbody>
</table>

*Data and dimensions may be changed without notice.*

**LOAD DIAGRAM**

**WORKING RANGE**

IRB 660-180/3.15 and IRB 660-250/3.15

**www.abb.com/robotics**