Further expanding ABB’s small robot portfolio, IRB 1100 provides 35% increased productivity and up to 10% space savings.

**Class-leading performance for high-quality manufacturing**
Aimed at increasing manufacturing productivity, IRB 1100 provides up to 35% faster cycle times and best-in-class repeatability for high-quality manufacturing.

IRB 1100 consistently outperforms similar robots in terms of payload and position repeatability (RP) even when under space constraints. Indeed, IRB 1100 offers the highest payload for a robot of its class.

**Compact and small footprint design ensures flexible installation**
Compared to the previous generation, the IRB 1100 robot design was optimized with a 10% smaller footprint and over 20% weight reduction for space-efficient installation in diverse environments, such as electronics manufacturing factories.

The small footprint allows multiple robots to be deployed simultaneously in order to collaboratively perform automation operations, enabling more flexible handling for heavy-load operations with complex tools/end effectors.

Powered by ABB’s new OmniCore™ controller, IRB 1100 is equipped with advanced motion control capabilities, making it ideal for supporting rapid assembly, pick-and-place, and material handling applications.

**Rugged yet compact IP67 rated**
The IRB 1100 has IP40 as standard protection and IP67 as option. The entire robot is designed to be IP67 compliant according to IEC 60529 - from base to wrist, which means that the electrical compartments are sealed against water and solid contaminants.

**Key benefits**
- Offers 35% faster cycle times for increased productivity
- 10% smaller footprint and over 20% weight reduction for easy installation
- The highest payload for a robot of its class
- Equipped with up to 16 I/O for more sophisticated/complex applications

**Main applications**
- Assembly & Testing
- Loading & Unloading
- Screw driving
- Rubber insertion
- Polishing, grinding, buffing, deburring and sanding

**Key features**
- Offers 35% faster cycle times for increased productivity
- 10% smaller footprint and over 20% weight reduction for easy installation
- The highest payload for a robot of its class
- Equipped with up to 16 I/O for more sophisticated/complex applications
### Specification

<table>
<thead>
<tr>
<th>Robot version</th>
<th>Reach (m)</th>
<th>Payload (kg)</th>
<th>Armload (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>IRB 1100-4/0.475</td>
<td>0.475</td>
<td>4</td>
<td>0.5</td>
</tr>
<tr>
<td>IRB 1100-4/0.58</td>
<td>0.58</td>
<td>4</td>
<td>0.5</td>
</tr>
</tbody>
</table>

- Number of axes: 6
- Mounting: Any angle
- Controller: OmniCore C30/C90XT
- Integrated signal and power supply: 8 signals on wrist
- Integrated air supply: 4 air on wrist (Max. 6 Bar)
- Integrated ethernet: 1 Gbit/s port

### Performance (according to ISO 9283)

- 1 kg picking cycle
- 25 x 300 x 25 mm
- 0.42 s

### Technical information

- Dimensions robot type: 160 x 172 mm
- Weight IRB 1100-4/0.475: 21 kg
- Weight IRB 1100-4/0.58: 21 kg

Data and dimensions may be changed without notice.

### Movement

<table>
<thead>
<tr>
<th>Axis movement</th>
<th>Working range</th>
<th>Axis max. speed IRB 1100-4/0.475</th>
<th>Axis max. speed IRB 1100-4/0.58</th>
</tr>
</thead>
<tbody>
<tr>
<td>Axis 1 rotation</td>
<td>+230° to -230°</td>
<td>460°/s</td>
<td>460°/s</td>
</tr>
<tr>
<td>Axis 2 arm</td>
<td>+113° to -115°</td>
<td>380°/s</td>
<td>360°/s</td>
</tr>
<tr>
<td>Axis 3 arm</td>
<td>+55° to -205°</td>
<td>280°/s</td>
<td>280°/s</td>
</tr>
<tr>
<td>Axis 4 wrist</td>
<td>+230° to -230°</td>
<td>560°/s</td>
<td>560°/s</td>
</tr>
<tr>
<td>Axis 5 bend</td>
<td>+120° to -125°</td>
<td>420°/s</td>
<td>420°/s</td>
</tr>
<tr>
<td>Axis 6 turn</td>
<td>+400° to -400°</td>
<td>750°/s</td>
<td>750°/s</td>
</tr>
</tbody>
</table>

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