Outline

Overview
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Targeted industry
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OmniCore™ Controller
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**Overview**

**Differentiated Value Proposition**

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

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*Carry More, Move Faster and Act More Precisely While Taking Less Working Space*
# Features

IRB 1100 Preview

<table>
<thead>
<tr>
<th>Item</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reach (mm)</td>
<td>475/580</td>
</tr>
<tr>
<td>Payload (kg)</td>
<td>4</td>
</tr>
<tr>
<td>Position repeatability (mm)</td>
<td>TBC</td>
</tr>
<tr>
<td>Protection</td>
<td>IP40</td>
</tr>
<tr>
<td>Cleanroom</td>
<td>CR4</td>
</tr>
<tr>
<td>Footprint (mm)</td>
<td>160 x 160</td>
</tr>
<tr>
<td>Mounting</td>
<td>Any angle</td>
</tr>
</tbody>
</table>

A. M12 8pin CP/CS
B. M12 8pin Ethernet
C. Ф4×4
# Advantages and benefits

Smaller and yet perform better

## Advantages

- The highest payload in the class
- The best repeatability in the class
- Over 35% faster cycle times
- Over 10% smaller footprint and slimmer body
- Over 20% weight reduction because of new design
- Over 50% more I/O
- IP40 and Clean Room support

## Benefits

- Flexibility & productivity within very limited space
- Running the most accurate manufacturing process given very limited space
- Handling heavier operations with more complex tool or end effector
- Up to 16 I/Os for more sophisticated applications
Targeted industry
Automotive, electronics and other general industries
Main dimensions
IRB 1100-4/0.475
Main dimensions
IRB 1100-4/0.58
Main dimensions

Working Range

IRB 1100 – 4/0.475

IRB 1100 – 4/0.58
Outline manipulator
IRB 1100-4/0.475 vs IRB 1100-4/0.58
Outline manipulator

Calibration

Axis 1

Axis 2

Axis 3

Axis 4

Axis 5

Axis 6
Easy integration
Customer interfaces

A. 8 x customer signals 30V, 0.5A
B. 4 x air, 5bar
   (4 x φ4)
C. Ethernet
D. Break Release
Easy integration
Underlying connections

A. 8 x customer signals 30V, 0.5A
B. 4 x air, 5bar (4 x φ4)
C. Ethernet
D. Break Release
Easy integration
Mounting interfaces

IRB 1100
Specifications

<table>
<thead>
<tr>
<th>Robot version</th>
<th>Reach (mm)</th>
<th>Payload (kg)</th>
<th>Armload (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>IRB 1100-4/0.48</td>
<td>475</td>
<td>4</td>
<td>0.5</td>
</tr>
<tr>
<td>IRB 1100-4/0.58</td>
<td>580</td>
<td>4</td>
<td>0.5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Protection</th>
<th>IP40</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mounting</td>
<td>Any angle</td>
</tr>
<tr>
<td>Controller</td>
<td>OmniCore</td>
</tr>
<tr>
<td>Integrated signal and power supply</td>
<td>8 signals on wrist</td>
</tr>
<tr>
<td>Integrated air supply</td>
<td>4 air outer arm (5 Bar)</td>
</tr>
<tr>
<td>Integrated Ethernet</td>
<td>1 Gbit/s port</td>
</tr>
</tbody>
</table>

### Performance (according to ISO 9283)

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
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<tbody>
<tr>
<td>1 kg picking cycle</td>
<td>0.42 s</td>
</tr>
<tr>
<td>25 x 300 x 25mm</td>
<td></td>
</tr>
<tr>
<td>Position repeatability</td>
<td>TBC</td>
</tr>
</tbody>
</table>

### Technical information, physical

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Dimensions robot base</td>
<td>160 x 160 mm</td>
</tr>
<tr>
<td>Weight IRB 1100-4/0.48</td>
<td>20.5 kg</td>
</tr>
<tr>
<td>Weight IRB 1100-4/0.58</td>
<td>21 kg</td>
</tr>
</tbody>
</table>
OmniCore™ Controller
IRB 1100 is Equipped with The State-of-the-art Controller

- The first offering from ABB’s new era of flexible, intelligent and tailored solutions
- A impressive range of controllers to deliver the ideal solution for every need
- Designed for the rigorous performance and reliability needed to support 24/7 production of high-mix, low-volume products in shorter product cycles
- Significant size reduction for installation space savings.
- With the same superior precision, cycle times and speed that ABB is renowned for the new controllers can tackle the toughest challenges
- Fast time to market
- Smaller
- High throughput
- The ABB Ability™ for the connected “Factory of the Future”
Targeted applications

Loading & unloading/assembly & testing

Reach mm

Payload kg

IRB 1100’s position
Targeted applications

Application examples

1. Assembly
2. Screw Driving
3. Rubber Insertion
4. Labeling
5. Soldering
6. Tampon Printing
7. Dimension Measuring
8. Function Testing
9. Filming
10. LCD Panel Stacking
11. Picking & Placing
12. Sealing
13. Packaging
14. Loading & Unloading
15. Sorting
16. Testing
17. More...
Summary
Outstanding Performance Without Space Headaches

Be More Productive with Less Space

- Flexibility & productivity within very limited space
- Running the most accurate manufacturing process given very limited space
- Handling heavier operations with more complex tool or end effector
- Up to 16 I/Os for more sophisticated applications