ABB’s new mid range robot family
IRB 2600 - The sharp generation
The IRB 2600 robot range
Overview of main features

- 4<sup>th</sup> generation six axis robot arm
- 3 models in the range
- Compact and lightweight design
- High size to reach ratio
- Fastest 6 axis robot in the ABB range
- All mounting positions available
- Ingress Protection IP67 as standard
- Optional Foundry Plus 2 protection
The IRB 2600 robot range
General purpose robot to suit many applications

- Machine tending
- Material handling
- Arc welding
- Laser welding
- Cutting
- Dispensing
- Assembly
- Palletizing and packing
- Inspection and measuring
The IRB 2600 robot range
3 models

<table>
<thead>
<tr>
<th>Payload</th>
<th>Reach</th>
<th>Height</th>
<th>Footprint</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>12kg</td>
<td>1.65m</td>
<td>1.382mm</td>
<td>676mm x 511mm</td>
<td>272kg</td>
</tr>
<tr>
<td>20kg</td>
<td>1.65m</td>
<td>1.582mm</td>
<td></td>
<td>284kg</td>
</tr>
<tr>
<td>12kg</td>
<td>1.85m</td>
<td></td>
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</tr>
</tbody>
</table>

Key data:
- Payload: 12kg and 20kg
- Reach: 1653mm and 1853mm (to center of axis 5)
- Height: 1382mm and 1582mm
- Foot print: 676mm x 511mm
- Weight: 272kg and 284kg
IRB 2600-20/1.65
Load diagram with additional armloads (1kg + 10kg)
IRB 2600-20/1.65
Up to 22kg with wrist vertical*

Load diagram permits +/- 10 degrees on axis 5.

* a maximum of 27kg is possible with reduced armloads. Check RobotLoad for your specific load case.
IRB 2600-12/1.65
Load diagram with additional armloads (1kg + 15kg)
IRB 2600-12/1.85
Load diagram with additional armloads (1kg + 10kg)
IRB 2600-12/1.85
Up to 13kg with wrist vertical

Load diagram permits +/- 10 degrees on axis 5.
Working range at center of 5\textsuperscript{th} axis
High size to reach ratio

IRB 2600-1.85m model

IRB 2600-1.65m models
Working range / Velocity

- **Axis 1**: +180° to -180°, Max speed: 175 °/s
- **Axis 2**: +155° to -95°, Max speed: 175 °/s
- **Axis 3**: +75° to -180°, Max speed: 175 °/s
- **Axis 4**: +400° to -400°, ± 251 rev. max, Max speed: 360 °/s
- **Axis 5**: +120° to -120°, Max speed: 360 °/s
- **Axis 6**: +400° to -400°, ± 274 rev. max, Max speed: 500 °/s
Performance & Accuracy
Tests performed to ISO 9283 standards

- Pose repeatability (RP) 0.04 mm
- Pose accuracy (AP) 0.03 mm
- Linear path repeatability (RT) 0.13 – 0.16 mm
- Linear path accuracy (AT) 0.55 – 0.68 mm
- Pose stabilisation time (PSt) 0.00 – 0.09 sec.
Main Dimensions

R 98 min turning radius of axis 4

R 337 min turning radius of axis 1

IRB 2600-XX/1.65 1382
IRB 2600-12/1.85 1582

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Flexible mounting
Floor, wall, ceiling & tilted (up to $45^\circ$ round the Y-axis)

Wall mounting, max working range for axis 1:

- $\pm 45$ degrees for short arms and $\pm 40$ degrees for IRB 2600-12/1.85 with max payload and armload.

- $\pm 180$ degrees for IRB 2600-XX/1.65 with max 8 kg combined payload and armload.

- Check with RobotLoad for your specific load case.
Easy to integrate
Customer interfaces

DeviceNet, PROFIBUS
or
Parallel I/O (CP/CS)
Base of robot

To customer equipment

Air

Ethernet/IP or
PROFINET

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Easy to integrate
Mechanical mounting interfaces

- M6 (x2)
- M8 (x2)
- M8 (x3)
- M8 (x4)
- M8 (x3)
- M8 (x2)

Only IRB 2600-12/1.85
The IRB 2600 robot range
Summary

- 4th generation robot, based on 37 years experience.
- Compact, lightweight and flexible for maximum space utilization.
- High performance delivering up to 25% shorter cycle times.
- Accurate motion for increased process and product quality.
- Highly reliable with the best in class protection.
- Payload increased 20-70% from 3rd generation.
- Reach below the base increased 110-150% from 3rd generation.
- Easy to use, easy to integrate.
- Four field buses, digital signals, air and power to the upper arm and electronic position switches.