

# IRB 2400 Industrial Robot

## Main Applications

Arc welding  
Cutting/Deburring  
Glueing/Sealing  
Grinding/Polishing  
Machine tending  
Material handling



## Most popular industrial robot

IRB 2400 is the world's most popular industrial robot in its class. It comprises a complete family of application optimized robots that maximize the efficiency of your arc welding, process and tending applications.

The IRB 2400 is a real hard worker. It can take additionally 35 kg load on axis 1 and 15 kg additional load on the upper arm - still keeping 100 % duty cycle.

The IRB 2400L model has 1.8 meters reach, 7 kg load capacity, large working range and slim arm and wrist. Other models offer handling capacity of up to 20 kg, excellent motion control, large load offset and unlimited motion in axis 6.

This means there's an IRB 2400 robot to give you excellent performance in your material handling, tending and process applications. All models offer you inverted mounting capability. The compact design of the IRB 2400 ensures ease of installation. The robust construction and use of minimum parts contribute to high reliability and long intervals between maintenance.

The Foundry Plus version is washable with high pressure steam and it's supplied with increased environment protection meeting IP 67 standard.

# IRB 2400

## Specification

Robot versions	Handling capacity	Reach	Protection
IRB 2400L	7 kg	1.8 m	Foundry
IRB 2400-10	12 kg	1.5 m	FoundryPlus, Clean room
IRB 2400-16	20 kg	1.5 m	FoundryPlus, Clean room
Mounting	Floor and inverted all versions. Wall IRB 2400-10		
Supplementary load	IRB 2400L	IRB 2400-10	IRB 2400-16
Upper arm,			
-wrist end	1 kg	2 kg	2 kg
-rear end	10 kg	10 kg	10 kg
Base unit	35 kg	35 kg	35 kg
Number of axes			
Robot manipulator	6		
External devices	6		
Integrated signal supply	23 poles, 50 V DC 10 poles, 250 V AC		
Integrated air supply	Max. 8 bar		

## Performance

Position repeatability	0.06 mm (average result from ISO test)		
Axis movements	IRB 2400L	IRB 2400-10	IRB 2400-16
Working range			
Positioning			
Axis 1, Rotation	360°	360°	360°
Axis 2, Arm	200°	200°	200°
Axis 3, Arm	125°	125°	125°
Re-orientation			
Axis 4, Wrist	370°	400°	400°
Axis 4, Option	–	Unlimited	Unlimited
Axis 5, Bend	240°	240°	240°
Axis 6, Rotation	800°	800°	800°
Axis 6, Option	Unlimited	Unlimited	Unlimited
Max. speed			
Positioning			
Axis 1, Rotation	150°/s	150°/s	150°/s
Axis 2, Arm	150°/s	150°/s	150°/s
Axis 3, Arm	150°/s	150°/s	150°/s
Re-orientation			
Axis 4, Wrist	360°/s	360°/s	360°/s
Axis 5, Bend	360°/s	360°/s	360°/s
Axis 6, Rotation	450°/s	450°/s	450°/s

\*) For wall mounted version

## Electrical Connections

Supply voltage	200–600 V, 50/60 Hz
Rated power	
Transformer rating	4 kVA/7.8 kVA with external axes

## Physical

	IRB 2400L	IRB 2400-10	IRB 2400-16
Dimensions			
Total height	1,731 mm	1,564 mm	1,564 mm
Manipulator bases	723x600 mm	723x600 mm	723x600 mm
Weight			
Robot	380 kg	380 kg	380 kg

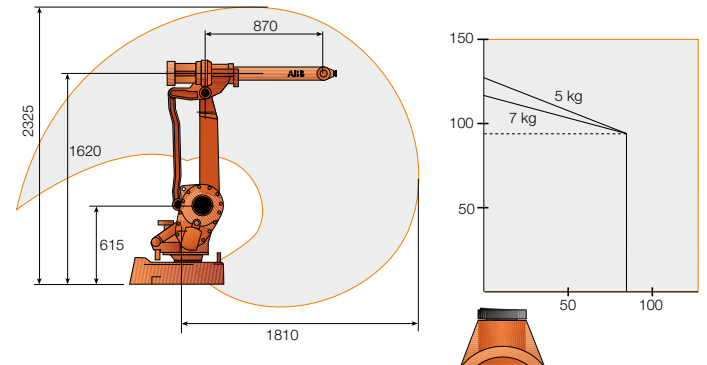
## Environment

Ambient temperature			
Basic manipulator			
in operation	5°C - 45°C		
Relative humidity	Max. 95%		
Degree of protection	IRB 2400L	IRB 2400-10	IRB 2400-16
Standard and			
Clean Room versions	IP54	IP54	IP54
Foundry or			
Foundry Plus versions	IP55/67	IP67	IP67
Noise level	Max. 70 dB (A)		
Emission	EMC/EMI-shielded		

Data and dimensions may be changed without notice

## Working range and load diagram

IRB 2400L



IRB 2400-10, IRB 2400-16

