

ROBOTICS

IRB 660

Taking palletizing to new heights



Pushing the working envelope

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.

Thanks to its state-of-the-art 4-axes design, customers can look forward to a speedy machine that combines a 3.15 meter reach with a 250 kg payload, making it ideal for palletizing bags, boxes, crates, bottles and more. ABB reinforces its position as the global supplier of complete robot packaging line automation.

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 is easy to come to grips with. ABB's multi-functional IRC5 controller and comprehensive packaging line software, PickMaster, house all the key functions for quick, easy programming and intuitive operation on the shop floor. 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!

Robot versions		
	IRB 660-180/3.15	IRB 660-250/3.15
Handling capacity	180 kg	250 kg
Reach	3.15 m	3.15 m

Specification	
Number of axes	4
Protection class	IP67
Mounting	Floor
IRC5 controller variants	Single cabinet, dual cabinet

Physical	
Robot base	1136 x 850 mm
Weight	1650 kg

Electrical connections	
Supply voltage	200-600 V, 50/60 Hz
Power consumption	ISO cube: 2.7 kW
	Normal movements: 3.2 kW

Performance	
Axis number	Axis movements
Axis 1	+180° to -180° Opt: +220° to -220°
Axis 2	+85° to -42°
Axis 3	+120° to -20°
Axis 6	+300° to -300° default +150 rev. to -150 rev. max
Position repeatability	0.1 mm
Path repeatability	0.3 mm

Max. velocity		
Axis number	IRB 660-180/3.15	IRB 660-250/3.15
1	130°/s	95°/s
2	130°/s	95°/s
3	130°/s	95°/s
6	300°/s	240°/s

Cycles per hour	
Load	Cycles per hour
60 kg	2190
110 kg	2040

Environment		
Ambient temperature for mechanical unit	During operation	+0°C to +50°C
	During transport/storage	-25°C to +55°C
	Short periods (max 24 h)	Up to +70°C
	Relative humidity	Max. 95 %
Noise level	Max 73 dB (A)	
Safety	Double circuits with supervision, emergency stops & safety functions, 3 position enabling device	
Emission	EMC/EMI shielded	

Standard palletizing cycle

