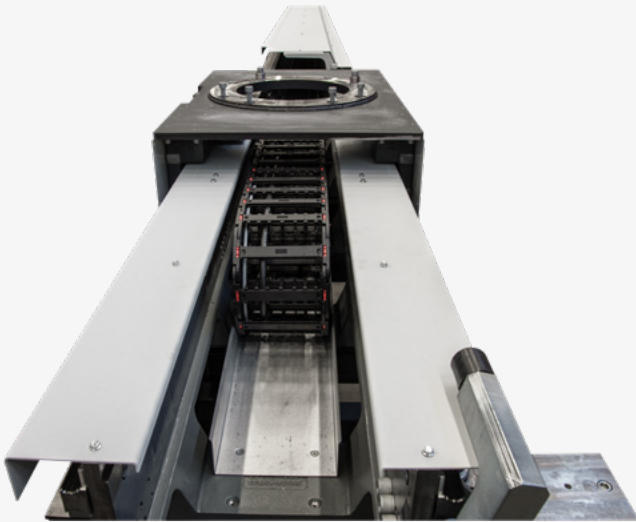


IRT 510

Medium Track Motion Platform



The only track motion platform on the market to guarantee high speed and precision accuracy, the IRT 510 from ABB offers greater flexibility and up to 50% shorter cycle times.

Modular platform design

ABB's Medium Track Motion (MTM)'s design is smart and compact with a symmetrical profile. Maximum integration ensures the protection of components in a small footprint.

The IRT 510 consists of a standard 1 meter long module that allows for the addition of numerous track and travel lengths for robots applications. The track's modularity allows for product evolution during its entire life span.

Adaptable to various environments, the IRT 510 is available in two variants, standard uncovered and fully covered.

Supported robot families

- IRB 1520 OmniCore
- IRB 1600 OmniCore
- IRB 2600 OmniCore
- IRB 4600 OmniCore

Prepared for different process applications The IRT 510 is available with multiple carriages - two for the robot. The robot track is available with additional carriage plates that allow them to carry the required equipment for specific applications such as Sealing.

The internal cable chain of IRT 510 can be delivered pre-equipped with the suitable cables for different application, or different customer power and signal cables.

Each robot carriage has the option of being equipped with an empty external cable chain for additional application cables. Robot pedestals range from 250mm to 1000mm and can be selected as can robot orientations.

Outstanding speed and accuracy

ABB's unique QuickMove™ and TrueMove are also critical to the MTM's functionality. Together they guarantee optimal movement for the robot and the track with actual load. Path accuracy and speed are also optimized.

Benefits

- Path accuracy best in class.
- Compactness and modularity
- Integrated and protected components
- Prepared for different applications (Material Handling, Machine Tending).
- Wide range of options for different configurations.
- Unique platform for robots
- High reliability, low maintenance need, easy to repair

Options	IRT 510	
Track type	Robot	
Carriages	1 to 2	
Track length	2 to 21 modules of 1m length	
Track travel direction	Standard or Mirrored	
Track version	Standard or Covered	
Additional carriage plate	For each robot carriage	
Robot Orientation	0°, 90°, 180° 270°	
Robot Pedestals	250mm to 1000mm (limited to 250mm for IRB4600)	
External cable chain	For each robot carriage	
Internal cables packages	Robot Cables, Customer power/ Customer signals (CP/CS)	

IRT 510		
Max Payload (Kg)	1200 kg	< 600kg
Speed (m/s)	2 m/s	2 m/s
Max. acceleration (m/s ²)	2,5 m/s ²	4 m/s ²
Pose repeatability, RP (mm)	≤ ± 0.05	≤ ± 0.05

Travel Length	1	3	5
Positioning time (s) max payload 1200kg	1,42	2,48	3,46
Positioning time (s) payload <600kg	1,15	2,15	3,16

Pos	Description*	Robot	Robot with extra plate
A	Total width	700	
	Height	450	
D	Width (foot print)	584	
E	End cover	115	
F	Distance between two feet	500	
G	Length of one section	1000	
H	Carriage table length	1048	2209
	Distance between the end cover and its nearest feet	365	
I	Total length of the track with internal cable chain	230 + Nx 1000**	

Note: If option external cable chain is used some of the values in the table will change.

*All dimensions are in mm.

**In which N indicates the numbers of sections

