IRB15000 Collaborative Robot System

Strong yet safe robot designed to handle payloads up to 5 Kg (11 lbs.)

GoFa incorporates a range of features that allow it to be used safely, directly alongside human workers and without the need to design and build bulky barriers or fencing. GoFa can continuously share workspace with people, giving it maximum flexibility and efficiency. Robot and human cooperate on the same tasks, without jeopardizing productivity or safety. The GoFa robot offers versatility in applications such as small part assembly, pick & place, or load / unload applications.

Wizard easy programming - An easy and intuitive way to program!

ABB's Wizard easy programming is an easy graphical programming interface for your robot. Only a few minutes after the installation you will be able to operate your YuMi - no specialized training or programming skills are required. <u>> Learn more</u>





Video Links:

- Meet ABB's GoFa
- How to use Lead through with the GoFa
- <u>Step-by-step guide on pick / place app w/ Wizard</u> <u>Easy Programming Tool</u>

Robot System includes:

- Robot arm
- Robot controller
- FlexPendant
- Cables & Software

P/N CRB15000-CONFIG1

CRB15000 Collaborative Robot Arm

Robot Features	
Description	Specification
No. of Axes	6
Weight	18 Kg / 39.7 lbs.
Robot Reach	950 mm / 37.4 inches
Payload Capacity	5 Kg / 11 lbs.
Position Repeatability	0.05 mm / .002 in
Protection Class	IP54
Max Velocity ^{1,2}	2.2 m/s or 7.2 ft / sec
Robot cable	7 m / 23 ft

¹ Safe collaborative speed will be lower, refer to the SafeMove configurator app for recommendation.

² Always do a safety risk assessment of your cobot application

Key features

- 5 Kg rated payload
- Superior power and force limiting performance
- Safe design of robot, rounded geometry, no pinch/trap points
- High speed and accuracy
- PL d Cat 3 Protective stop and emergency stop
- Powered by ABB OmniCore[™] Controller

Customer benefits

- Short cycle times
- Fenceless operation²
- Easy programming with lead-through
- Lower investment
- Easier to integrate



ABB

ABB OmniCore[™] robot controller for GoFa[™] CRB 15000

OmniCore[™] C30 Desktop Controller

OmniCore™ C30 Robot Controller Features		
Description	Specification	
Weight1	22 -28 Kg / 48 – 62 lbs.	
Dimensions	509 mm x 514 mm x 193 mm 20.0 in x 20.2 in x 7.6 in	
Protection Class	IP20	
Communication	Ethernet: Private LAN, IO LAN, & WAN (Public)	
Optional IO Gateways	Ethernet IP, ProfiNet, ProfiSafe, CC-Link, DeviceNet	
Power Input Requirements	100 – 230 VAC, Single Phase	
Digital I/O	24 VDC, 16 inputs / 16 Outputs	
Programming Teach Pendant	ABB FlexPendant with 3 m cable, USB 3.0, graphical multi-touch 8" color screen with joystick and 12 button membrane keyboard	
Software	Programming through the FlexPendant or ABB's Programming Wizard is standard. Robot Studio is optional	
¹ Depending on robot variant		

Key features

- Extensive integration possibilities
 Desktop version for elegant cable management for easy integration
 New FlexPendant Design (Robot Teach
- New FlexPendant Design (Robot Teach Pendent)
- Best In Class Motion
- Cyber security features protect the robot from intrusion and unverified software installation

FlexPendant key features

- Modern, intuitive, and powerful
- Large multi-touch display with standard gestures such as pinch, swipe and tap
- Hot swappable (Optional). Unplug during operation and share among several robots
- Extensive customization possibilities

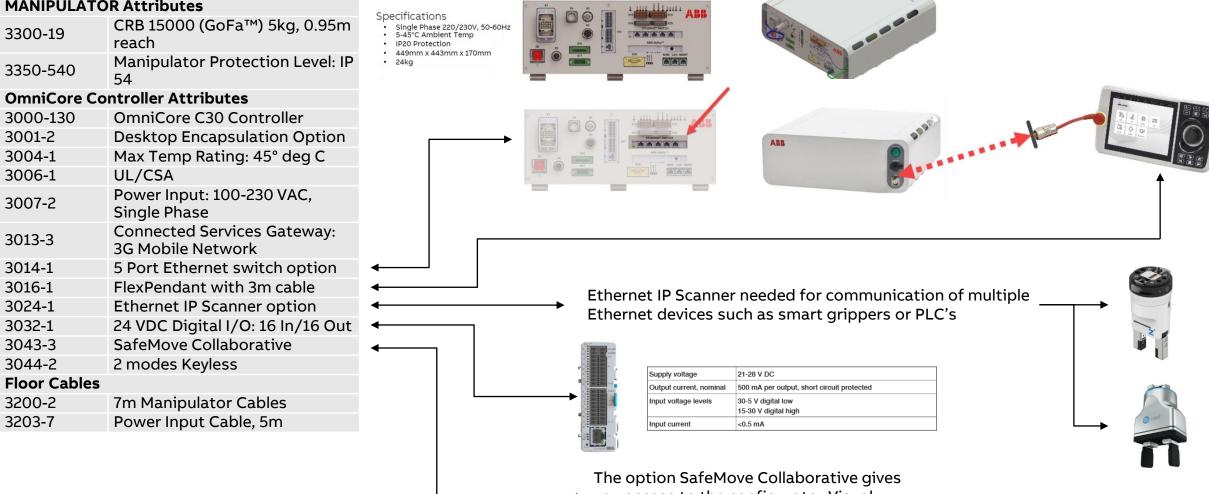
Customer benefits

- The OmniCore controller's compact design offers space saving benefits along with a variety of flexible integration possibilities
- ABB's Wizard graphical programming software makes it easy to begin programming the robot without any specialized training or programming skills



Additional robot system details

MANIPULATOR Attributes



you access to the configurator Visual SafeMove in RobotStudio.

Additional robot system details

Softwa	are Attributes (ABB's RobotWare)	Description
3106-1	World Zones	Used to supervise zones in space regarding tool positions and arm configurations (joint).
3107-1	Collision Detection	Collision detection is a software option, which reduces collision impact forces on the robot. In this way, the robot and external equipment can be protected from severe damage.
3150-1	Collision Avoidance	Collision avoidance is a software option that enables the possibility to stop the robot before colliding with fixed objects, such as fences, the floor or equipment in the cell. A collision model for the objects need to be built and downloaded to the controller using RobotStudio.
3113-1	Path Recovery	The Path Recovery option is used to store all system data, when an interruption occurs (fault message or other) and restores them after necessary actions have been taken.
3114-1	Multitasking	The Multitasking Option gives the possibility of executing up to 20 programs (tasks) in parallel, including the main program. Multitasking can be used to control peripheral equipment or other processes concurrently with robot motion.
3119-1	Robot Studio Connect	This option allows RobotStudio to connect to the robot using the public network interface (WAN).
3120-2	Essential App Package	The option Essential app package includes features that will make it easy and efficient to work with the robot system. Jog functionality is improved with 3D illustrations, and dashboards makes it easy to view the system status at a glance
3151-1	Program Package	The option Program package is required in order to create new and edit existing RAPID programs on the FlexPendant. If the program package is not selected with the FlexPendant, RobotStudio must instead be used on a separate PC to create and edit RAPID programs.
3121-1	RW Add-In prepared	RobotWare Add-In prepared makes it possible to run licensed Add-Ins from 3rd party developers on the IRC5 controller.

ABB GoFa[™] CRB 15000 Product Links

