Robotics Paint

IRC5P Quality painting made easy

IRC5P is the newest generation paint robot control system from ABB. It is specifically designed for the paint shop.



Powered by IPS

IRC5P integrates our high speed process control, IPS, with our superior motion technology. This provides full control of the paint process, cuts down cycle time and saves paint as well as the environment.

Designed for painting

IRC5P comprises the new Ex certified FlexPaint Pendant and the next level in paint cell supervision - RobView 5.

The system automatically adapts to the paint application configuration according to the actual installation. This helps you set up and configure RobView, RobotWare Paint, PLC mapping and IPS.

Increased uptime

Automatic start-up diagnostics, fast error log filtering with Pareto diagrams and process diagnostics help you reduce the time for fault tracing and keeps the system up and running.

Manage your installation

With RobView 5 you can manage your paint installation, whether it is one or many robots, visualize the complete paint process, and operate and supervise your paint robot cell.

Test your paint equipment

The FlexPaint Pendant has an intuitive paint user interface with a seamless integration of the paint process. You use it to test and calibrate your paint process equipment, to jog and program the robot, and to test your paint programs.



IRC5P

Paint robot control system

Quality painting made easy

Specification	
Dimensions	W: 725 mm, D: 710 mm, H: 1450 mm
Weight	180 - 200 kg (depending on options)
Protection degree	IP54
Ex classification	II 2 G Ex ib px IIB T4
	II 2 D Ex pD 21 T65°C
	FM Class I,II. Div.1, Group C,D,G 135°C
Ambient temperature	
- Operation	0°C to +48°C (recommended max. <30°C)
- Storage / transport	-25°C to +55°C
Relative humidity	max. 95% non-condensing
Color specification	Grey RAL7035
Airborne noise level	< 70 dB (A) Leq (according to 98/37/EEC)
Controller software	RobotWare Paint
	Powered by IPS
Programming language	RAPID
Electrical	
Mains voltage	200 - 600 V AC, three-phase, +10%, -15%
Mains frequency	48.5 to 61.8 Hz
Transformer	6.7 kVA
Power consumption	Stand by < 300 W
	Production < 700 - 2200 W (average*)

Machine interface	
Available I/O boards	s Analog, Digital, Relay, 120 VAC I/O boards
	Encoder and Sync board
	Process (PIO) board
Fieldbus support	Interbus-S, ProfiBus, Profinet, CC Link,
	DeviceNet, Ethernet IP
Network	Ethernet FTP/NFS
Backup interface	USB connection and Ethernet
PC Tools	
RobView 5	Paint cell supervision and operation
ShopFloor Editor	Off-line path- and process tuning using 3D graphics

RobotStudio Paint 3D simulation and programming of the paint cell

7000 h (for absolute measurement)

According to international standards



User interface	
Operator panel	on cabinet
Programming unit	FlexPaint Pendant, Exi certified, soft keys,
	dual joystick, graphical 3.5 inch backlit TFT
	color screen. Asian language support.
	Safety EMY stop, live handle / enable
	device, test mode hold-to-run.

RobView 5



A basic version of RobView 5 is bundled with all IRC5P paint robots, free of charge*. It is an affordable graphical user interface for low budget installations. However, it is scalable and expandable with plug-in options for large and advanced installations. *Requires activation

RobView 5 features included in the basic version:

- IPS monitor and data trending
- Production view with process data
- One user-configurable screen, with buttons, gauges, LED panels, IPS curves, etc. in the toolbox
- Job queue handling
- Basic editor for program-, brush-, and color change files
- Advanced diagnostics to visualize status and errors, Pareto diagrams
- Automatic background file transfer, replication and change log
- Support for common communication protocols (FTP/OPC)

Expandable RobView 5 options:

- Multiple user-configurable screens with toolbox
- 3D Program editing using ShopFloor Editor

Information may be changed or updated without notice



Backup battery

Electrical safety

*Depending on manipulator model and speed