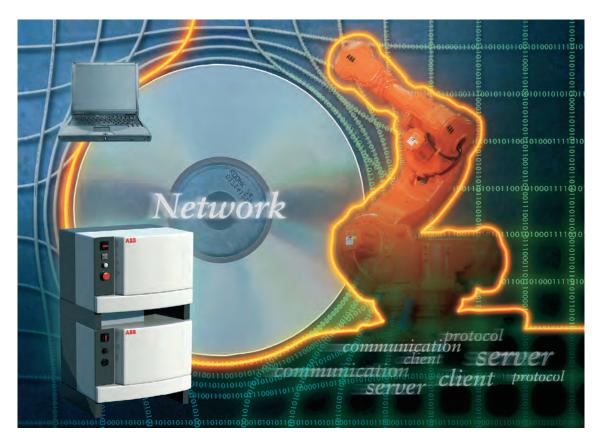




Communication

Industrial Robot Controller Functionality



On speaking terms with your needs

The unmatched communication capabilities of the IRC 5 robot controller provide you with superior performance in terms of easy integration and total flexibility, as well as efficient monitoring and plantwide data collection.

Two Ethernet channels enable optimum separation of communication tasks. This reduces installation and booting time and improves productivity. The service channel is located at the operator's panel and provides a plug-and-play connection for e.g. service tasks. The LAN-channel can be permanently connected to the factory network for tasks such as program transfer, monitoring, customized operator screens and business data collection.

The controller can be integrated into single work-cell systems as well as into large scale factory automation systems. Since the I/O system supports a wide range of fieldbus standards, the extensive configuration possibilities include distributed devices, safety equipment and third party equipment as well – the flexibility corresponds to all your needs.

Key benefits

- Facilitates integrated solutions and reduces installation costs.
- Increases productivity with a PC connected to the robot controller.
- Supports third party fieldbus modules and gives you total flexibility.
- Enables local and remote monitoring of plant wide production data, statistics and diagnostic information using a standard Internet browser.



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TECHNICAL FEATURES

I/O SYSTEM		SERIAL CHANNELS	
Functionality	Up to 1 024 signals 8 in/out discrete I/O		One channel, RS 232 or RS 422
	Up to three fieldbus channels 20 boards per channel Customizable I/O names	RobotWare Options Booting capability	RobotWare and RobotWare options. RobotStudio Online
	Grouping of signals Interrupts on both discrete and analog signals Capability to connect 3rd party modules Wide range of ABB boards in DeviceNet Multiple fieldbuses simultaneously possible Cross connection with logical conditions	I/O System	The I/O system has the possibility to use sever al types of fieldbuses both as master and slaves. A large number of I/O modules of different brands can be used.
	3	PC-interface	This option enables the robot to communicate
FIELD BUSES Master and/or Slaves	ODVA compliant DeviceNet 1 or 2 channels. Profibus DP, Interbus		with a PC using WebWare products. Typical actions are program execution, write/read data and change of robot mode. It also enables communication with RobotStudio,
DeviceNet Gateway	Allan-Bradley RIO		otherwise restricted to the service channel only.
modules	Interbus Profibus CC-link	NFS/FTP-client	Are used to access files on a corresponding server over the factory network.
NETWORK CAPABIL Service channel	ITY & FILE MANAGEMENT	Socket Messaging directly from RAPID.	The possibility to communicate with the network,
and LAN	Two built in Ethernet channels	File and serial	
Fast communication	10 or 100 Mbit/s	channel handling	Read/write to service channels and files
Network file access	The robot controller can host both NFS (Network File System) and FTP (File Transfer Protocol) client software.	Filedbus command interface	Enables command messages to field bus modules
Robot Control system file access	FTP (server software) The FTP server on the robot allows the controller to respond to a request from an FTP client on a remote computer.	SOFTWARE PRODUCTS	
		OPC server Enables access to the controller via a standardized OPC server.	
DNS	Domain Name Server Correlates device names to associated network IP addresses through a DNS server. Allows the robot to access a network computer via a DNS server to determine the network IP addresses of other devices on the network.	Robot SDK	A software development kit that allows you to design your own PC application which communicates with the robot controller.
		WebWare	A family of software products which provides services to Internet clients. Backup, monitor-
DHCP	Dynamic Host Configuration Protocol Enables quick connection to the network IP addresses are automatically obtained. LAN channel (DHCP client software) The channel has either a fixed IP address or it can be obtained from a DCHP server on the network. Service channel (DHCP server soft- ware) The channel has a fixed IP address and can assign the connected PC an IP address.		ing, control, remote diagnostics, scheduled events. Access to the robot controller also via the
		For more detailed information	office network and Internet. about Software tools, see separate data sheets for each tool.



SNMP

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Simple Network Management Protocol Enables quick access of control system net-

work information.