



Control And Information Products Guide



**Rockwell
Automation**

Bringing Together Leading Brands in Industrial Automation

the answer to increasing your productivity and flexibility, while reducing your total cost of investment. We offer more than 100 years of experience in manufacturing control solutions.

Rockwell Automation Integrated Architecture provides seamless integration of control, communication, and visualization across multiple platforms – process, motion, drives, and sequential – throughout your facility. We offer Logix™ Platforms and I/O systems for control, NetLinx™ open network architecture for communications, and ViewAnyWare™ for visualization. Our PLC-5®, SLC™ 500, MicroLogix™ and PICO™ controllers, along with a wide range of world-class control components, make your operation a model of pure efficiency, shop floor to top floor.

This is a guide to key Allen-Bradley® and Rockwell Software™ control and information products along with an overview of our services and support. For additional information, visit our Web site: www.rockwellautomation.com or www.ab.com.



Communications

Build Your Networks On A Simple Human Concept. Sharing.

NetLinx™ Open Network Architecture

EtherNet/IP

Control, configure, and collect data on standard Ethernet TCP/IP using CIP (Control and Information Protocol) to provide services for automation applications

- Based on NetLinx open network architecture and can seamlessly communicate with any NetLinx-based network
- High-speed (10/100 Mbps) commercially based network
- Capable of transferring large files of data as well as short messages
- Open, supported by ODVA, ControlNet International, IAONA, and Industrial Ethernet Association
- Products are available or under development from more than 60 suppliers including Rockwell Automation



ControlNet™

Control, configure, and collect data on a single network designed specifically for automation applications using CIP (Control and Information Protocol)

- Based on NetLinx open network architecture and can seamlessly communicate with any NetLinx-based network
- 5 Mbps network designed for industrial automation applications that require precise timing, repeatability, and redundancy
- Open, supported by ControlNet International, CENELEC, and IEC standards
- Products available from more than 50 global suppliers including Rockwell Automation

DeviceNet™

Control, configure, and collect data on a CAN-based network incorporating CIP (Control and Information Protocol), which provides the key features for simple industrial automation applications

- Based on NetLinx open network architecture and can seamlessly communicate with any NetLinx-based network
- Supports speeds up to 500 Kbps. Designed to cost-effectively provide communications for simple devices such as sensors, valves, drives, motor starters, and operator interface stations
- Open, supported by ODVA, CENELEC, and IEC standards
- Thousands of products available from more than 400 global suppliers including Rockwell Automation



Other Networks

Universal Remote I/O

Control I/O and intelligent devices from a controller via this simple network

- Installed globally in a huge variety of applications
- Considered the *de facto* standard, and when combined with Data Highway, together they are the most widely used automation networks in the world
- Operates at 57.6, 115.2, and 230.4 Kbps. Controller manages network communications and scans other devices on the network
- Rockwell Automation owns and manages the technology that is licensed to other companies to provide a complete system offering
- More than 2 million nodes have been installed and represent a wide range of products and suppliers including Rockwell Automation

Data Highway Plus™

Configure and collect data on this simple peer-to-peer network

- Used to link multiple controllers to create a plant-wide data-sharing automation system
- Installed globally in a huge variety of applications
- Used with RIO to provide the *de facto* standard and most widely used automation networks
- Communicates among a maximum of 64 nodes at 57.6 Kbps and 230.4 Kbps for configuration and data collection
- Rockwell Automation owns and manages the technology that is licensed to other companies to provide a complete system offering
- Multiple vendors provide a wide array of operator interface, PC communication cards, and devices for the network including Allen-Bradley and Reliance

DH-485

Connect SLC™ 500 and MicroLogix™ controllers, operator interface stations, and programming devices to allow small packets of data to be communicated and shared

- Communicates among a maximum of 32 nodes at 19.2 Kbps for configuration and data collection
- Rockwell Automation owns and manages the technology that is licensed to other companies to provide a complete system offering
- Strong installed base of Allen-Bradley SLC and MicroLogix controllers and operator interface from a variety of vendors

MediaChecker™

Find A Network Problem Before You Have A Production Problem

This handheld diagnostic tool pinpoints any wire-related network problem quickly, so you can correct it first, before production startup.

You can troubleshoot physical layer faults on both NetLinx-based and established networks. With MediaChecker, you can test network cable for shorts and opens. It displays distance to cable short and open. It identifies connectors improperly wired at the connector end, and it measures network cable length, including taps and drops, and termination resistance.



Save time and money on system installation, and feel confident knowing your network foundation is solid.

Controllers

Now You Can Do So Much More, More Efficiently, For So Much Less.

PLC-5®

Rugged design and demonstrated performance in the world's most demanding applications



- The proven solution for large sequential control applications
- Easy-to-use Microsoft Windows® programming improves productivity
- Used by over 70% of the Dow Industrials
- Interfaces with the NetLinx open network architecture to allow for system expandability
- Common look-and-feel of product and programming tools saves spare parts costs and training time

Network Connectivity

EtherNet/IP, ControlNet, DeviceNet, Remote I/O, DH+

SLC™ 500

Used by industrious workers everywhere



- Popular choice for sequential control applications
- Economical and easy-to-use processors with broad capabilities
- A top choice of many OEMs due to its value and flexibility
- Field-proven reliability covering hundreds of thousands of applications
- Advanced instruction set including indirect addressing, high-level math capability, and compute instructions

Network Connectivity

EtherNet/IP, ControlNet, DeviceNet, Remote I/O, DH+, DH-485

ControlLogix™

The high-performance control platform for multiple types of control



- Provides a modular, high-performance control platform suited for sequential, process, drive, and motion control in any combination
 - Allows you to mix multiple processors, networks, and I/O without restrictions
 - Uses the same RSLogix™ 5000 programming environment as other Logix controllers for maximum program reusability and minimum training
 - Connects to the NetLinx open network architecture for more efficient communications and increased throughput
- Network Connectivity*
EtherNet/IP (I/O control and messaging), ControlNet, DeviceNet, Remote I/O, DH+, DH485

ProcessLogix™

Integrating DCS into your plant-wide control solution



- Scalable, open control system for batch and process applications (DCS)
 - Tightly integrates HMI and control functions with a server-based common database
 - Shares common hardware, network communications, and I/O with ControlLogix for tightly integrated plantwide control
 - Provides connectivity to Allen-Bradley PanelView™ and Rockwell Software RSVIEW32™
 - Connects to the NetLinx open network architecture for more efficient communications and increased throughput
- Network Connectivity*
EtherNet/IP, ControlNet, Foundation Fieldbus

FlexLogix™

Distributed control without compromise



- Adds local control to FLEX™ I/O, the compact, modular DIN-rail mounted I/O system with integrated I/O interface and terminal strip, to reduce wiring
- Provides a distributed architecture less vulnerable to a single point of failure because control does not depend on a single master controller
- Reduced startup and simplified maintenance because control resides close to the machine
- Uses the same RSLogix 5000 programming environment as other Logix controllers for maximum program reusability and minimum training
- Connects to the NetLinx open network architecture for more efficient communications and increased throughput

Network Connectivity

ControlNet, DeviceNet, DH-485

SoftLogix5800™

Bringing together the worlds of information and control



- An open, PC-based Logix solution that integrates control, motion, HMI, and information processing into one complete solution to lower your total cost of system integration and increase productivity
- Supports Windows® NT/Windows® 2000
- Allows you to mix multiple processors, networks, and I/O without restrictions
- Uses the same RSLogix 5000 programming environment as other Logix controllers for maximum program reusability and minimum training
- Connects to the NetLinx open network architecture for more efficient communications and increased throughput

Network Connectivity

ControlNet, DeviceNet, Other Networks

CompactLogix™

The power of Logix in a small controller

- A cost-effective, powerful addition to the Allen-Bradley family of Logix-based products
- Compact form factor and rackless design – compatible with the full range of 1769 Compact™ I/O products – provide a truly scalable modular system
- Uses the same RSLogix 5000 programming environment as other Logix controllers for maximum program reusability and minimal training



Network Connectivity

EtherNet/IP, DeviceNet, DH-485 (using interface modules)



MicroLogix™

Just enough control at just the right price

- You choose the controller that fits your application needs
- Three controller families – MicroLogix 1000, 1200, and 1500 – with greater expandability than ever before
- Versatility and flexibility in these powerful microcontrollers with small footprints
- Common instruction set and RSLogix 500 programming software
- You can even get simple, noninterpolated motion control at a great price

Network Connectivity

EtherNet/IP, DeviceNet, DH-485,

PICO™

**Is it a PLC or is
it a smart relay?**

You decide!



- No programming software required – use the onboard LCD display and keypad for all programming and data changes
- Small size – smaller than many kinds of relays, saving panel space and lowering system cost
- Simplicity – performs basic PLC® functions, such as logic, timing, and counting – anyone can write simple ladder logic programs or make data adjustments
- Real-time clock, analog inputs for DC controllers, and high-current relay outputs can eliminate interposing relays
- Expansion I/O available for added flexibility

Safety Controllers



GuardPLC1200^M and GuardPLC2000^M



Scaleable Safety Control Solutions

- Safety control systems with the integrity level (SIL3) certified by TUV Product Services in accordance IEC 61508
- Testable inputs and outputs together with a watchdog guarantee fail-safe operation
- Designed to meet requirements for robot weld cell, mechanical stamping press, entertainment ride, emergency shutdown applications
- System consists of the controller (two different types are available) and associated I/O; programming and configuration tool, Ethernet communications between the programming and configuration tool and the controllers



Selection Chart

Controllers

Feature	PICO	MicroLogix	SLC 500	CompactLogix	FlexLogix	SoftLogix	ControlLogix	PLC-5	ProcessLogix
Memory (max.)	0.5K instructions	12K words	64K words*	64 kbyte	512 kbyte	PC Dependent	7.5 mbyte	100k words*	7.5 mbyte
I/O (max.)	Up to 38	Up to 16 Compact I/O modules	4096	Up to 16 Compact I/O Modules	256 Local Optional Remote I/O		128,000 Digital 3,800 Analog	3072	64 I/O Modules
Nonvolatile Memory	EEPROM Backup	EEPROM Backup Memory Module	Separate EEPROM Module 32, 64K Words	Retentive Memory Modules	Retentive Memory Modules		Retentive Memory Modules for ControlLogix5555 processors	Separate EEPROM Module 16, 32, 64 100k Words	Future
Local I/O	Embedded/Expansion Module	Embedded, 1769, 1762	1746	1769	1794	None	1756	1771	1756

Distributed I/O	All I/O types available on DeviceNet adapters	1794, 1734, 1792D, 1791D, 1790, 1798, 1797, 1799, 1746	1794, 1734, 1792D, 1791D, 1790, 1798, 1797, 1799	1794, 1734, 1792D, 1791D, 1790, 1798, 1797, 1799	1794, 1734, 1792D, 1791D, 1790, 1798, 1797, 1799	1794, 1734, 1792D, 1791D, 1790, 1798, 1797, 1799	1794, 1734, 1792D, 1791D, 1790, 1798, 1797, 1799
Motion Options	Simple motion through Pulse Train Outputs	Requires separate motion controller	Future	Fully Integrated	Fully Integrated	Requires separate motion controller	
Redundancy/ Hot Backup		X			X	X	X
Programming Software	Optional PICO Soft	RSLogix 500, RSLogix 500 Starter	RSLogix 5000	RSLogix 5000**	RSLogix 5000	RSLogix 5	Control Builder (System Level)
Programming Editors	Ladder	Ladder	Ladder, FBD SFC, ST-future	Ladder	Ladder, FBD	Ladder, SFC, ST	FBD

*1 PLC/SLC word = 10 Logix bytes

** Also supports embedded C/C++ routines

I/O

Network Or System, We Can Connect You With The Solution.

General Purpose Distributed I/O Platforms

FLEX™ I/O Family (1793, 1794)

**The easiest I/O to learn and use
with Plug-n-Play operability**

- FLEX I/O family is easily distributed, with reduced terminations to 4 per I/O device leading to wiring savings
- Cost-effective I/O due to RIUP I/O modules and space savings on panel size
- Flexibility in control, communication, I/O, and termination styles
- Mix or match multiple I/O to multiple devices
- Features an integrated terminal strip
- 4- through 32-point modules available

Network Connectivity

EtherNet/IP, ControlNet, DeviceNet, Remote I/O, Other Networks



POINT™ I/O Family (1734, 1734D)

**I/O with the most structural integrity
and Best-of-Breed machine availability**

- Point Level Electronic Diagnostics alert with wire-off detection, short-circuit detection, and a single bit for each channel forwarded to the processor
- Interlocking design maintains backplane continuity of POINT I/O modules in high-vibration applications



- Gold-plated contacts (60 microns) are the best in the industry, guaranteeing highest quality and integrity of system operation
 - Replace electronic I/O modules without powering down the system
 - Hot plug and play allows OEMs to add machine features and I/O modules without making changes to the machine's control software
 - 16 points with integrated DeviceNet and Power Supply
 - Removable terminations
 - The most competitively priced I/O with removable terminations
- Network Connectivity*
DeviceNet, Other Networks

1798 FLEX Armor™ I/O

Get enclosure and wiring savings with this hardened, fully modular, expandable I/O

- Up to 64 I/O per node
- Contains 2-, 4-, 6-, or 8-slot backplanes
- Features 12mm QD I/O connection, 12mm or 18mm Network connection, and RIUP I/O module



Network Connectivity

DeviceNet, Other Networks

1769 Compact™ I/O

Value-focused I/O offers unique features and excellent functionality

- Modular, rackless design enhances cost savings
- Integrated bus/backplane with front insertion and removal
- Highly versatile I/O platform works with CompactLogix and MicroLogix 1500
- DIN-rail or panel-mount options increase flexibility
- Distributed via DeviceNet Adapter (1769-ADN) for lower installation costs



Network Connectivity

DeviceNet

Application Focused Distributed I/O Platforms

1791 Block I/O

**Compact-designed I/O
in a self-contained package**

- Mounts in smaller, less-expensive enclosures
- Embedded into protected areas of a machine or process
- Easy to wire and install
- Simplified tear-down and reassembly with easy-to-locate distributed blocks

Network Connectivity

Remote I/O

Applications

Material handling, packaging, operator interface panels



1791D CompactBlock™ I/O

**Low price and high value for I/O
on DeviceNet**

- Contains protected outputs, selectable input filter times, autobaud detection, and hardware watchdog function
- Easy-to-use node address switches for easy configuration
- Features integrated DeviceNet adapter and power supply in base module plus expansion module
- 50% smaller than FLEX I/O
- Features DeviceLogix™ smart component technology

Network Connectivity

DeviceNet

Applications

Material handling, packaging, operator interface panels



1790 CompactBlock™ LDX I/O

The I/O with lower specifications for lower cost



- Features an expandable block I/O system
- Up to 64 digital point per node
- 1/3 shock and vibration protection of regular CompactBlock I/O
- Modular EDS configuration with RSNetWorx™ v3.0

Network Connectivity

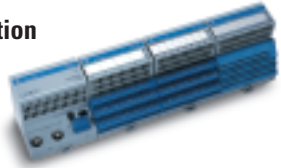
DeviceNet

Applications

Semiconductor tool machines, light industrial

1797 FLEX Ex™ I/O

Cost-effective I/O with installation and maintenance savings



- Contains RIUP I/O modules and advanced diagnostics
- I/O with no need for IS barriers
- Significantly reduces hardware and field wiring costs

Network Connectivity

ControlNet, DeviceNet, Remote I/O, Other Networks

Applications

Intrinsically safe (IS) for hazardous areas

1792D ArmorBlock™ MaXum™ and High-Current ArmorBlock™ I/O

Machine-mountable I/O with the lowest overall maintenance cost

- Contains Point Level Diagnostics for SC, OW
- A variety of input, output (up to 10A), and combo modules
- Direct connect to Flat or Round DeviceNet media provides major labor cost savings and prevents wiring errors
- Contains node address switches for easy configuration
- Features DeviceLogix™ smart component technology

Network Connectivity

DeviceNet

MaXum Applications

Conveyor systems, material handling

High Current ArmorBlock Applications

On vehicle welding



1799 Machine-Embedded I/O

Unpackaged printed circuit board I/O that allows you to buy *only* what you need

- Ideal for OEMs who do not value packaging; for subassemblies that are complete Field-Replaceable Units or where the machine's structure can provide the protective enclosure
- Same tested and reliable circuit designs as packaged products
- True Component I/O allows for selection of optional hardware components; allows OEMs to buy "Just What You Need" for optimal purchasing decisions
- Lowest price-per-point purchase cost
- Comes with DeviceLogix™ smart component technology

Network Connectivity

DeviceNet

Applications

Conveyor automation, zone control



Chassis-Based I/O

1756 I/O

Easy configuration and setup of I/O modules using wizards increases productivity

- Wide selection of digital, analog and speciality I/O
- I/O wizards in RSLogix 5000 for quick and easy software configurations
- Diagnostic screens in RSLogix 5000 provide the information needed to fine-tune the system
- Removal and insertion under power (RIUP) for ease of maintenance
- Electronic keying ensures that a module placed in the ControlLogix chassis is the correct type and revision, preventing replacement errors



Network Connectivity

EtherNet/IP, ControlNet

1771 I/O

I/O available to meet nearly any chassis-based application

- Over 150 modules offered by Rockwell Automation
- Third-party products widely available to support specialty applications
- Can be controlled by all Allen-Bradley controllers using ControlNet and Remote I/O communications
- High-density 32-point DC I/O and 16-point analog inputs save panel space and reduce system cost
- High-speed counter modules and fast-response DC inputs available for high-speed applications



Network Connectivity

ControlNet, Remote I/O

1746 I/O

Removable terminal blocks allow for quick replacement without rewiring

- Over 75 modules offered by Rockwell Automation
- Third-party products widely available to support specialty applications
- High-density 32-point DC I/O and 16-point analog inputs save panel space and reduce system cost
- High-speed counter modules and fast-response DC inputs available for high-speed applications
- Fusing and electronic protection reduce the need to replace modules damaged by short circuits and overloads



Network Connectivity

ControlNet, Remote I/O

Selection Chart

I/O

General Purpose I/O Platforms				
	1794, 1793 FLEX I/O Family	1734, 1734D POINT I/O Family	1769 Compact I/O	1798 FLEX Armor I/O
I/O Types	Digital Analog Counter/ Encoder Relay Temperature	Digital Analog Counter/ Encoder Relay	Digital Analog Relay Temperature	24V DC only
Industry-Specific Attributes	48V DC 125V DC (Relay)	Point-Level Electronic Diagnostics	Patented, Integrated Communication Bus Connector	IP65/IP67 Hardened NEMA 4X, 6P
Protected Outputs	X	X	X (24V DC)	X
Removable Terminal Blocks	X	X	X	No 12mm Quick Connect
DeviceLogix				
Communication Options	Remote I/O, ControlNet, DeviceNet, Other Networks	DeviceNet Adapter, Other Networks	DeviceNet Adapter	DeviceNet, Other Networks
RIUP	X	X		X
Mounting Options	DIN Rail Panel-Mount Vertical or Horizontal*	DIN Rail Panel-Mount Vertical or Horizontal*	DIN Rail Panel-Mount	Machine- Mount Vertical or Horizontal*
Special Considerations	Easily Distributed; Reduce Terminations to 4 Per I/O Device	Low Installation Costs; Minimal Unused Points	No Backplane Cost	No Enclosure Needed; AutoBaud Detect
Applications	General Purpose			

*No thermal de-rating required.

Application Focused I/O platforms					
1790 Compact Block LDX I/O	1791 Block I/O	1791D Compact Block I/O	1797 FLEX Ex I/O	1792D ArmorBlock MaXum I/O	1799 Machine- Embedded I/O
24V DC Only Relay; Future: AC Analog Temperature	Digital Analog	24V DC Only	Digital Analog Frequency Temperature	24V DC Only	24V DC Only
Targeted for Semiconductor Tool OEMs Supply, and I/O in One Block	Rack, Adapter, Power	Hardware Watchdog	Intrinsically Safe	IP67 Hardened Board I/O	Unpackaged, Printed Circuit
	X	Not Necessary Due to IS	X	X	
D-Shell Only	X		X Quick Disconnect	No 12mm	X
		X		X	X
DeviceNet	Remote I/O	Integrated DeviceNet Adapter Remote I/O, Other Networks	ControlNet, Bus Isolator to: DeviceNet,	DeviceNet	DeviceNet
X		X	X		
DIN Rail Panel- Mount Vertical or Horizontal*	DIN Rail Panel- Mount Vertical or Horizontal*	DIN Rail Panel-Mount	DIN Rail Vertical or Horizontal*	Machine- Mount Vertical or Horizontal*	Machine- Embedded
Light-Duty Applications; Low Cost Per Point; Expandable Block I/O	No CE Mark	Expandable Block I/O System; AutoBaud Detect	No Need for IS Barriers; For Hazardous Areas: Class 1, Div 1, or Zone 1	No Enclosure Needed; AutoBaud Detect	Integrate into Field- Replaceable Unit
Semiconductor tool machines, light industrial	Material handling, packaging, operator interface panels		Hazardous material	Conveyor systems, material handling	Conveyor automation, zone control

Electronic Operator Interface

Keep Track Of Production. To Keep Production On Track.

PanelView™ 'e' Operator Interface

High-performance graphic terminals designed for complex and demanding processes

- Available in keypad or touchscreen versions
- Optimized for processing and manipulating large amounts of data away from the controller
- Enhanced graphics, communications, and functions including expressions and trending
- The choice for PanelView 1200/1200e migration



Network Connectivity

ControlNet, Remote I/O, DH+

PanelView 'e' Selection Guide

PanelView 1000e		PanelView 1400e
Display		
Type	Color, Active Matrix, Thin Film Transistor (TFT)	Color CRT Display, Configurable VGA or SVGA
Size	10.4-inch (26.4 cm) Diagonal	14-inch (35.5 cm) Diagonal
Replaceable Backlight	Field-Replaceable Backlight	
Operator Input	Keypad or Touchscreen	
Touch Cells	192	
Function Keys	21 (F1-F21)	
Application Memory	2.25 MB Onboard Flash; Expandable to 15.75 MB with External PC Memory Card	
Programming	PanelBuilder 1400e	
Electrical		
Communication Port	ControlNet, DH+, Remote I/O	
Power Requirements	AC: 90-132 or 180-264 VAC; DC: N/A	

PanelView™ Standard Operator Interface

Low-cost graphic terminals offering advanced operator interface solutions



- Offers preferred connectivity to all of Rockwell Automation's programmable logic controllers. Supports the PLC-5 family, the small logic controller and MicroLogix controller family, as well as Rockwell Automation's most powerful logic controller – ControlLogix.
- Offers multiple operator input capabilities, brilliant monochrome or color displays, high-performance functions, and flexible communications options
- One programming software package (PanelBuilder 32™) supports entire family allowing easy conversion and reuse of existing applications, reducing development time, and improving productivity
- ATA PC flash memory cards for fast application downloads, convenient storage of Universal Language Support fonts, and simplified firmware upgrades
- Local language support for over 46 languages allows for installation worldwide

Network Connectivity

EtherNet/IP, ControlNet, DeviceNet, Remote I/O, DH+, DH-485, DF1, Other Networks

Selection Chart

PanelView Standard Selection Guide

	PanelView 300 Micro	PanelView 300	PanelView 550	PanelView 550T
Display				
Type	Monochrome Transflective LCD with Integral LED Backlight		Monochrome Liquid Crystal Display (LCD)	
Size	2.87" x 1.67" (73mm x 42mm)		4.75" x 2.38" (120mm x 60mm)	
Replaceable Backlight	N/A – 100,000-Hour LED Backlight Life		Field-Replaceable Backlight	
Operator Input	Keypad		Keypad or Combination Keypad and Touchscreen	Touchscreen Only
Touch Cells	N/A	N/A	128	128
Function Keys	4 (F1-F4)	8 (F1-F8)	10 (F1-F10)	
Application Memory	240K Flash (application object + text + bitmaps)			
Programming	PanelBuilder32 (Windows®-based)			
Electrical				
Communication Port	RS-232 (DH-485 protocol), DF1, 8-Pin Mini DIN Connector	DeviceNet, DH-485, RS-232 (DH-485 protocol), DF1	EtherNet/IP, DeviceNet, ControlNet, DH+, Remote I/O, DH-485, RS-232 (DH-485 protocol), DF1, Other Networks	
RS-232 Printer Port	N/A	1200, 2400, 9600, 19200 baud rate		
Power Requirements	AC: N/A; DC: 11-30 VDC	AC: N/A; DC: 18-32 VDC	AC: 85-264 VAC; DC: 18-32 VDC	AC: N/A; DC: 18-32 VDC

PanelView 600	PanelView 600T	PanelView 1000 Color	PanelView 1000 GrayScale	PanelView 1400
Color Active Matrix Thin Film Transistor				
Color Active Matrix Thin Film Transistor	Color Passive Matrix	Color Active Matrix Thin Transistor (TFT)	Electro-luminescent	Color CRT (SVGA)
4.54" x 3.4" (115mm x 86mm)		8.3" x 6.2" (211mm x 158mm)		10" x 7.5" (225mm x 191mm)
Field-Replaceable Backlight			N/A – Emissive Display	
Keypad or Combination Keypad and Touchscreen	Touchscreen Only	Keypad or Touchscreen		
128	128	384	384	384
10 (F1-F10)		16 (F1-F16)	16 (F1-F16)	21 (F1-F21)
		1M Flash (application object + text + bitmaps)		
PanelBuilder32 (Windows®-based)				
EtherNet/IP, DeviceNet, ControlNet, DH+, Remote I/O, DH-485, RS-232 (DH-485 protocol), DF1, Other Networks				
1200, 2400, 9600, 19200 baud rate				
AC: 85-264 VAC;	AC: N/A; DC: 18-32 VDC	AC: 85-264 VAC; DC: 18-32 VDC	AC: 85-264 VAC; DC: 18-32 VDC	AC: 85-264 VAC; DC: N/A

Dataliner™ Message Displays

Highly visible VFD or LED displays for alarm, status, or other important messages

- Offers master (sends stored messages) and slave (receives stored messages) functionality

Network Connectivity

Remote I/O, RS-232/485, Parallel

Dataliner DL40 Plus

- Two- or four-line displays
- Replacement for DL40, DL20, and DL10 Dataliner displays
- Slave version to connect to DL40 Plus or other ASCII host device



Dataliner DL5

- Compact one- or two-line displays
- Slave version to connect to DL40 Plus or other ASCII host device



Dataliner DL50

- Red or tricolor LED messages visible up to 240 feet (73m)
- Selectable character size to display one- or two-line messages



MicroView

- Compact two-line x 16-character backlit LCD display
- Handheld and panel-mount versions for mounting flexibility
- Two function keys, numeric and navigation keys
- MicroLogix controller support only



InView™ Message Displays

Large format displays for communicating process information to the plant floor

- Bright red or tri-color LEDs (red, green, amber), with up to four lines of characters. Varying character size, font type, and messaging effects. On-board memory for easy message triggering
- Dynamic messaging with embedded variables
- RS-232/485 serial communications, and Ethernet connectivity with optional Ethernet module. Windows® configuration environment, supports ActiveX® control for use with RSVIEW 32 software
- Viewing distance of up to 350 ft. (100m). NEMA 12, 4 and 4X rated

Network Connectivity

RS-232/485, Ethernet TCP/IP, EtherNet/IP*, DeviceNet*

* Available in early 2002



Selection Chart

Message Displays Selection Guide

	InView	MicroView
Display		
Type	LED Matrix Red or Tri-color	LCD with LED Backlight
Character Size/ Height	4" (10.2cm), 4.8" (12.2cm) or 7.2" (18.3cm) with selectable size to 1.5" (3.8cm)	0.22" x 0.12" (5.56mm x 2.96mm)
Characters Per Line	12 to 40	16
Number of Lines	Up to 4	2
Character Set	Standard and Extended ASCII	Standard and Extended ASCII
Operator Input	–	Keypad
Function Keys	–	2 (F1-F2)
Approximate Viewing Distance	Up to 100m (350 ft.)	3m (10 ft)
Memory	Up to 4,000 messages	Up to 50 Application Screens
Electrical		
Input Voltage	120 – 240V AC 50 – 60 Hz	11 – 25V DC
Communications Port	RS-232, RS-485 Ethernet TCP/IP*, EtherNet/IP*, DeviceNet*	DF1(to MicroLogix)

* Optional communication modules

Dataliner DL5	Dataliner DL40 Plus	Dataliner DL50
Vacuum Fluorescent (VFD) 14 Segment Characters	Vacuum Fluorescent (VFD) 5x7 Dot Matrix Characters Adjustable 0% to 100% Brightness Level	LED Matrix Red or Tricolor
1-line: 6.65mm (0.262 in) 2-line: 5.50mm (0.261 in)	11.3mm (0.44 in)	122mm (4.8 in) or 5.33mm (2.1 in) Selectable
16	20	10 to 40
1 or 2	2 or 4	1 or 2
Alphanumeric; Uppercase Only	Standard and Extended ASCII International ISO-8859-1 Cyrillic	Standard and Extended ASCII
–	–	–
–	–	–
7.62m (25 ft)	2.1 in chars: 30.5m (100 ft)	4.8 in chars: 73m (240 ft)
2K EEPROM (94 messages) Screens (387 messages)	128K (up to 4000 messages) 8K EEPROM	–
12 – 24V DC	100 – 240V AC; 50 – 60 Hz	95 – 240V AC; 50 – 60 Hz
Parallel, RS-232	Remote I/O, Parallel, RS-232,	RS-232, RS-485 RS-485

MobileView™ Portable HMI

Portable and wireless devices for increased mobility on the factory floor.

MobileView Tablet – T750

- Wireless (WiFi compliant 802.11b), compact 8.4"x11"x2", approximately 4lbs., 7.7" VGA display
- Multi-function CE platform, thin-client and custom application support
- Additional communication support: IrDA, RS-232, USB, VGA and barcode port
- 8 hour lithium ion battery 3100mAh with auto-suspend power saving features



MobileView Machine Terminal – MT750

- Cabled, left- or right-handed device
- Compact 11.42" diameter x 5.12", shock-resistant shell design
- Multi-function CE platform, thin-client and custom application support, IrDA port and optional PC card slot
- 7.7" VGA display with touchscreen, keypad and optional PB, keyswitch, handwheel, and potentiometer operators



MobileView Guard Terminal

- All features of the MobileView Machine Terminal
- Combines mobile operator interface and safety elements in a single device, 2-channel, 3-position enable switch with optional 2-channel E-stop



MobileView Portable Selection Guide

	MobileView Guard	MobileView Machine Terminal	MobileView Tablet
Display			
Processor	Intel StrongARM-SA-1110/206m Hz		Hitachi SH-4 RISC (SH-7750)
Operating System	Microsoft Windows CE		
Memory	16M DRAM/32M Flash or 64M DRAM/64M Flash		32M Flash, 32MB SDRAM 32MB RAM Back-up and file storage
Display	Passive LCD 7.7" VGA 640x480, 256 colors		
Touch Screen	analog resistive		Analog resistive screen draw, hand-writing recognition
Keypad	Alpha-numeric keypad, PB, keyswitch, potentiometer, handwheel		Navigational keys program buttons on-screen alpha numeric keypad
Housing	Twin shell, resistive to grease, oil lubs, alcohol, silicone free. Flammability class: UL 90-V0		—
Dimensions	Dia.: 290mm (11.42") Depth w/o handle: 80mm (3.15") w/handle: 130mm (5.12")		28cmx22cmx5cm (11"x8.4"x2")
Weight	1550 grams (3.4lbs) w/o options		1.36kg (4lbs)
Wireless Technology	—	—	WiFi Compliant 802.11b direct sequencing, T _x power: 15 dBm, R _x sen: -83 dBm to -90 dBm
Electrical			
Supply Voltage Range	18V DC to 32V DC		Lithium Ion 300mAh Battery
Typical Input Current	300mA at 24V DC		AC Adapter/ Battery Charger
Power Supply	10ms minimum holdup time (EN 61131-2 and EN 50178)		

Industrial Computers Strategic Information From Strategic Locations. To Give You Centralized Control.

RAC6180 Computer†

Available with 10.4", 12.1", 15.0" and nondisplay options

- Panel- or rack-mount options
- Comes with a choice of Pentium® III 600, 700, or 800 MHz processor* and is designed to run Windows® 98, Windows NT®, or Windows 2000
- Two bays for EIDE HD – 30+ or 60+ Gbytes



RAC6155 Computer†

Industrial rack-mount computer

- Can be mounted in many orientations, including standard 19" rack
- Comes with front access fans, hard drives and media drives
- Built with a rugged corrosion-resistant enclosure
- Comes with Pentium® III 600, 700, or 800 MHz processor*
- 4U enclosure



†Communications options are EtherNet/IP, ControlNet, DeviceNet, Remote I/O, DH+, Other Networks.

*Processor speeds are continuously improving. Check www.ab.com for latest processor upgrades.

RAC6181 Computer†

Available in 10.4", 12.1" TFT LCD, and nondisplay options

- SVGA resolution (640x480 and 800x600)
- Comes with a choice of powerful Pentium, Celeron™, or Pentium III processors*
- Bay for EIDE HD – 20+, 30+ Gbytes
- Designed to run Windows 98, Windows NT, or Windows 2000
- CE mark, UL/CUL 1950 certified
- NEMA 4-rated, 4X stainless option
- Onboard Ethernet 10/100-Base T, 2 USB and 2 PS2 ports



RAC6182 Computer for Windows CE Operating System

100% solid-state industrial computer

- Internet-enabled with built-in Web browser
- Runs Windows CE 3.0 applications
- Thin client-enabled with integrated Ethernet 10/100-Base T
- Available with 7.7" STN LCD, 12" TFT LCD, and nondisplay options
- Supports 640x480, 800x600 and 1024x768 resolution
- Comes with 32-bit RISC processor* and Flash ROM
- Resistive touchscreen option
- NEMA 4X-rated panel, Class I, Division 2



RAC6185-B/C/D Flat Panel Monitor

Multiple display options available

- Available in 12.1", 15.0", and 18.1" TFT LCD display option
- Supports 640x480 to 1280x1024 resolution, full color
- Optional touchscreens include resistive and capacitive
- Supports multiple video formats
- NEMA 4/4X/12-rated panel
- AC and DC power supply options



RAC6185-H/J/K Flat Panel Monitor

Industrial alternative to consumer monitors

- Available in 15.0" and 17.0" Active Matrix TFT displays
- Supports 1024x768 to 1280x1024 resolution
- 15.0" = 170 nit, 160-degree viewing angle
- 17.0" = 200 nit, 140-degree viewing angle
- Optional touchscreens include resistive and capacitive
- NEMA 4/4X/12-rated panel
- Best used in moderate industrial environments



RAC6185-V Versa-Mount Flat Panel Monitor

Offered with versatile mounting options

- Large 18.1" display
- Mounting options include benchtop pedestal base, bench/wall-mount arm, bench/wall-mount yoke
- Supports 640x480 to 1280x1024 resolution, full color
- Optional touchscreens include resistive and capacitive
- UL, CE, C-Tick, FCC Class A
- AC and DC integrated and remote power supply option



RAC6157 Pure Flat Screen CRT Monitor

Supports 640x480 to 1600x1200 resolution

- Optional touchscreens include resistive, capacitive, and SAW
- Flat panel look at CRT prices
- NEMA 4/12/4X-rated panel
- Panel- or rack-mount options
- CE, UL, CUL, FCC Class A, C-Tick



Selection Chart

Industrial Computers

	RAC6155	RAC6180
Description	Rack-Mount Industrial Computer	Industrial Computer with Integrated Flat Panel Display
Processor Types & Speeds*	Long-Life Motherboards and State-of-the-Art High-Performance Pentium® III Processors	Long-Life Motherboards and State-of-the-Art High-Performance Pentium® III Processors
Number of Expansion Slots	3 PCI, 2 ISA, 1 Shared PCI/ISA, 1 AGP Video Slot	3 PCI, 2 ISA, 1 Shared PCI/ISA, 1 AGP Video Slot (1 ISA slot used by KIC card)
I/O	2 Serial Ports, 1 Parallel Port, 2 PS/2 Ports, 2 USB Ports	2 Serial Ports, 1 Parallel Port, 2 PS/2 Ports, 2 USB Ports, IrDA Port
RAM	64MB to 512MB	64MB to 512MB
Display Types & Sizes	Requires External Monitor	10.4" Color TFT LCD, 800x600 Resolution; 12.1" Color TFT LCD, 800x600 Resolution; 15" Color TFT LCD, 1024x758 Resolution
Touchscreen	N/A	Optional Resistive Analog Touchscreen, Optically Bonded to Display Window
Video Interface	8MB AGP Video Card	8MB AGP Video Card; 4MB AGP Video Card
Hard Drive	Standard EIDE (30+ Gbyte); Large EIDE (60+ Gbyte) 30+ GByte EIDE Hard Drive	Standard EIDE (30+ Gbyte); Large EIDE (60+ Gbyte)
Preinstalled Operating Systems	Windows 98, Windows NT 4.0 Workstation, Windows 2000	Windows 98, Windows NT 4.0 Workstation, Windows 2000

*Processor speeds are continuously improving. Check www.ab.com for latest processor upgrades.

RAC6181	RAC6182
Industrial Compact Computer with Integrated Flat Panel Display	Industrial Embedded Computer with Integrated Flat Panel Display
Intel Pentium and Petium III Processors Available in Speeds Up to 866MHz	MIPS, 225MHz RISC
2 Slot: 1 PCI, 1 Shared PCI/ISA (half-length); 4 slot: 2PCI, 1 ISA, 1 Shared PCI/ISA (half-lengths)	1 PCA (half-length)
2 Serial Ports (1 used with touchscreen option) 1 Parallel Port, 2 PS/2 Ports (keyboard and mouse) 2 USB Ports 1 10/100BaseT Ethernet Port 1 Video Port	2 Serial Ports (1 used with touchscreen option) 1 Parallel Port, 2 PS/2 Ports (keyboard and mouse) 2 USB Ports 1 10/100BaseT Ethernet Port 1 Video Port
32MB to 256MB	32MB to 256MB
10.4" Color TFT LCD, 640x480 Resolution; 12.1" Color TFT LCD, 800x600 Resolution	7" Color STN LCD, 640x480 Resolution; 12.1" Color TFT LCD, 800x600 Resolution
Optional Resistive Analog Touchscreen	Optional Resistive Analog Touchscreen
Embedded 2MB PCI Video (Pentium CPU), Integrated Video (Pentium III CPU)	Embedded 2MB PCI Video
Standard EIDE (30+ Gbyte); Large EIDE (60+ Gbyte)	Disk-On-Chip Storage Card, 32MB to 256MB
Windows 98, Windows NT 4.0 Workstation, Windows 2000	Windows CE

Selection Chart

Industrial Monitors

	RAC6157-C	RAC6185-B/C/D
Description	19" Pure Flat Industrial CRT Monitor	Standard Industrial Flat Panel Monitor
Operating Temperature	0°C to 40°C	0°C to 50°C
Operating Shock	10G max. (1/2 sine wave of 11ms duration)	20G max. (1/2 sine wave of 11ms duration)
Nonoperating Shock	20G max. (1/2 sine wave of 11ms duration)	30G max. (1/2 sine wave of 11ms duration)
Video Interface	HD-15 (RGB, HS, VS) 5 BNC Using Adapter Cable	HD-15 (RGB, HS, VS) 5 BNC Using Adapter Cable
Display Types & Sizes	19" Pure Flat CRT 640x480 to 1600x1200 Autosync 0.25mm Dot Pitch	12.0" Color TFT LCD, 800x600, 256 Colors; 15.0" Color TFT LCD, 1024x758, 256 Colors; 18.1" Color TFT LCD, 1280x1024, Full Color
Touchscreen	Optional 5-Wire Resistive Analog Touchscreen Optional Capacitive Touchscreen	Optional 5-Wire Resistive Analog Touchscreen Optional Capacitive Touchscreen on some Models
Enclosure Type	NEMA-4/4X/12 Panel-Mount 19" EIA Rack-Mount 9U	NEMA-4/4X/12 Panel-Mount NEMA -4X Stainless on some models; 19" EIA Rack-Mount 9U Available for 18.1" and 15" models
Operating System Compatibility	Windows 95/98, 2000, Windows NT V4.0, QNX, Linux	Windows 95/98, 2000, Windows NT V4.0, QNX, Linux

RAC6185-H/J/K	RAC6185-V
Cost-effective Industrial Flat Panel Monitor	Industrial Flat Panel Monitor in Versa-Mount Enclosure
0°C to 40°C	0°C to 40°C
10G max. (1/2 sine wave of	10G max. (1/2 sine wave of 11ms duration)11ms duration)
20G max. (1/2 sine wave of 11ms duration)	20G max. (1/2 sine wave of 11ms duration)
HD-15 (RGB, HS, VS) 5 BNC Using Adapter Cable PAL, S-Video, DVI, 5BNC Using Adapter Cable	HD-15 (RGB, HS, VS)
15.0" Color TFT LCD, 1024x758, 256 Colors; 17.0" Color TFT LCD, 1280x1024 16M Colors	18.1" Color TFT LCD, 1280x1024, Full Color
Optional 5-Wire Resistive Analog Touchscreen	Optional 5-Wire Resistive Analog Touchscreen Optional Capacitive Touchscreen
NEMA-4/4X/12 Panel-Mount	NEMA-1 Enclosure VESA FPMPI-Compliant Mount Optional Articulated Arm Available Accepts Standard TVESA FPMPI Yoke and Arm Mounting
Windows 95/98, 2000 Windows NT V4.0, QNX, Linux	Windows 95/98, 2000 Windows NT V4.0, QNX, Linux

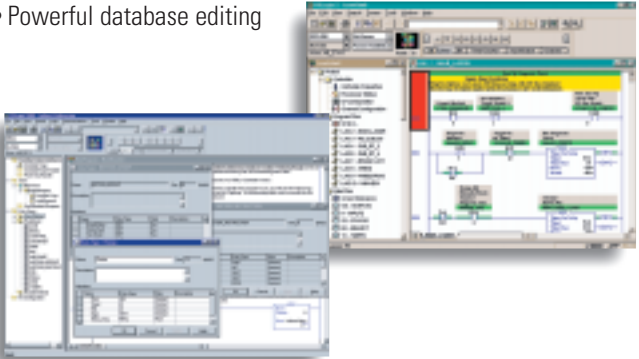
Software

Connecting People And Processes To Greater Productivity.

RSLogix™ 5, 500, 5000

The “smartest” control software

- Online/offline logic programming
- Program maintenance across hardware platforms
- Upward- and downward-compatible with DOS programs
- Powerful database editing



RSLinX™

Software that brings the entire network to your fingertips

- Complete communications driver suite for all RSI products
- Viewing of all active networks through a single window
- Ability to simultaneously run any combination of supported applications
- Fastest optimized OPC, DDE, and Custom C/C++ interfaces

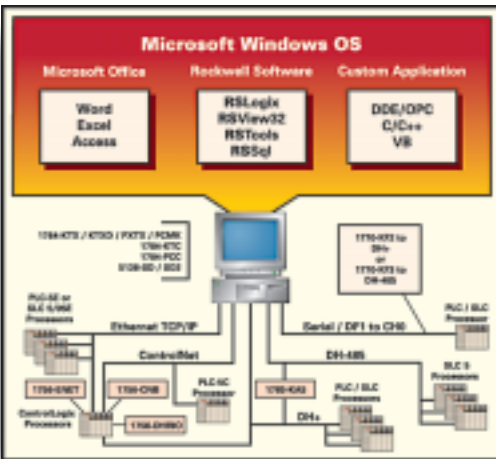
Network Connectivity

EtherNet/IP, ControlNet, DeviceNet, DH+

RSNetWorx™ (DeviceNet & ControlNet)

Manage the network at the click of a button

- Graphical network management configuration tool for ControlNet or DeviceNet networks
- An intuitive network browser for multinetviewing
- One button for complete network upload/download
- Enhanced diagnostics for real-time indicators



RSView32™

Software to see the process

from “anywhere”

- An integrated, component-based HMI software for monitoring and controlling automation machines and processes
 - Unprecedented connectivity to RSI, Microsoft®, and third-party applications
 - Reusable, customizable ActiveX® controls that embed directly into your graphic displays
 - Add-On Architecture that allows for adding only the extensions needed: RSView32 TrendX™, RSView32 Messenger™, RSView32 RecipePro™, RSView32 SPC™, and RSLadder™
- Network Connectivity*
 EtherNet/IP, ControlNet, DeviceNet, DH+, Other Networks for which there are OPC servers available

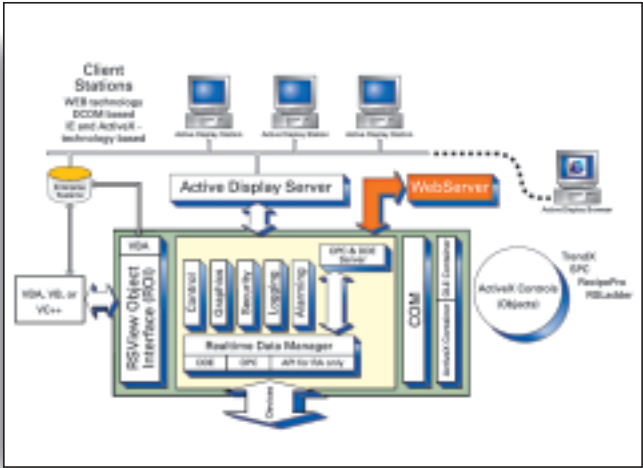


Selection Chart

Software

	RSLogix 5	RSLogix 500	RSLogix 500` Starter
MicroLogix		X	X
SLC		X	X**
PLC	X		
CompactLogix			
ControlLogix			
SoftLogix			
FlexLogix			
Windows® 95/98	X	X	
Windows NT®	X	X	
Windows® 2000	X	X	

*Windows 95 is still supported but is not recommended. ** No on-line editing



RSLogix 5000	RSLinx	RSNetWorx	RSView32
	X	X	X
	X	X	X
	X	X	X
X	X		
X	X	X	X
X	X		X
X	X	X	X
	X*	X	X
X	X	X	X
	X		X

Motion Control

Higher Speed, Greater Control, Increased Throughput.

1756-M08SE Motion Card

**SERCOS Interface™ Digital Drive Interface used
in ControlLogix Controller**

- Plastic or glass fiber digital drive interface
- Simple “fiber in” and “fiber out” connection
- Supports eight servo drives per module
- Can be used with Ultra3000 and 1394 digital servo drives
- Uses RSLogix 5000 to provide full support for motion programming, configuration and commissioning

1756-M02AE Motion Card

**Analog/Encoder Drive Interface used in
ControlLogix Controller**

- Analog output, quad encoder input (velocity or torque command)
- Supports two servo drives per module
- Compatible with a wide range of analog drives and actuators
- Uses RSLogix 5000 to provide full support for motion programming, configuration and commissioning

1784-PM02AE Motion Card

**Analog/Encoder Drive Interface used in
SoftLogix 5800 Controller**

- Analog output, quad encoder input (velocity or torque command)
- Supports two servo drives per module
- Compatible with a wide range of analog drives and actuators
- Uses RSLogix 5000 to provide full support for motion programming, configuration and commissioning

Ultra3000 Digital Servo Drive

Ultimate Performance, Ultimate Flexibility

- Able to fit your application worldwide with 100-480V AC power input capabilities
- Flexible architectures including stand-alone indexing for cost effective, point-to-point control to complete system integrated solutions for multi-axis coordinated motion
- Built-in support for multi-turn absolute encoders to eliminate costly and time consuming machine homing cycles
- Flexible enough to operate a wide variety of brushless servo motors as well as linear and third-party motors
- Powerful commissioning and diagnostic Ultraware software

Network Connectivity

DeviceNet



Ultra3000 Motor Performance Range

Speed	0-6000 RPM
Continuous Torque	0.57-58.2 Nm (5.05-515.07 lb.-in.)
Peak Torque	.5-101.7 Nm (4.42-900.05 lb.-in.)

Ultra3000 Digital Servo Drive with SERCOS Interface

In addition to the standard features, the Ultra3000 SERCOS interface drive features:

- Simplified integration in Logix architecture
- Single fiber-optic connection between drive and Logix controller
- Single-point drive commissioning through RSLogix 5000
- Upload/download of drive parameters without separate software

Ultra3000i Indexing Digital Servo Drive

In addition to the standard Ultra3000 features, the Ultra3000i indexing drive features:

- 64 configurable index profiles for absolute, incremental, registration-type positioning (stored in non-volatile memory) and jog
- Menu-driven parameter entry allowing up to 64 stored motion profiles, selectable via I/O or linked via software sequencing
- Ability to blend indexes without coming to a complete stop
- Ability to stop an index via digital inputs or serial inputs
- Built-in homing routines
- Eight preset positions for simple replacement of pneumatic cylinders

1394 Digital, AC, Multi-axis Motion Control System

The unique integrated design makes installation, integration, and operation a breeze



- A very cost-effective system that offers the ideal multi-axis motion solution
- Flexible 1394 configurations:
 - Integration with Logix with SERCOS communications
 - Link to PLC, SLC and ControlLogix controllers via NetLinX open network architecture
 - Use as a standalone motion controller

1394 Motor Performance Range

Speed (@460V)	0-7250 RPM
Continuous Torque	0.7-53 Nm (6.1-469 lb.-in.)
Peak Torque	21-126.8 Nm (18-1122 lb.-in.)

1394 Drive System with SERCOS Interface Motion Module

Integrated motion using SERCOS interface provides effortless precision

- RSLogix 5000 programming software provides complete integration of sequential and motion control, eliminating the need for multiple programming tools
- Uses the ControlLogix SERCOS interface motion module to replace costly discrete wiring with a fiber optic, digital drive link.
- A single digital fiber optic link eliminates up to 18 discrete wires per axis, significantly reducing wiring time and related costs
- Up to eight axes can be controlled from a single 1756-M08SE SERCOS interface motion module, 32 per controller
- Uses Smart Motor Technology to provide automatic identification of a specific motor connected to the drive. This reduces commissioning time and safeguards against incorrect motor replacement. Accuracy and velocity stability are increased with more than 2,000,000 position counts per motor revolution

1394 GMC and GMC Turbo Systems with Integrated Drive and Controller

Powerful, easy-to-use motion control system

- A full-featured motion controller integrated with a modular, digital, AC servo drive provides a single compact GMC package
- The GMC Turbo provides more GML application program memory and the highest levels of embedded program execution
- Provides up to four local axes (and 64 via AxisLink) of high-performance, closed-loop positioning and control
- Uses GML (Graphic Motion Language) Commander software that allows you to quickly program your motion application by simply creating a diagram, using graphical icons, and then filling in the motion and process details

1394 Analog Servo Drive

Versatile, standalone, multi-axis servo drive

- Configurable from one to four axes
- Auto-tuning and startup prompting allow quick commissioning
- Local onboard diagnostics and commissioning through the Allen-Bradley 1201 HIM (Human Interface Module)
- Interfaces to a wide variety of controls using standard +/- 10V DC analog interface

Network Connectivity

EtherNet I/P, ControlNet, DeviceNet

Ultra5000 Intelligent Positioning Drive

- Fully programmable controller provides advanced motion control functions to any single-axis application
- High-speed processing for increased axis performance and control capabilities
- Advanced math capabilities for the most demanding application calculations
- Proven power architecture for reliability
- ANSI C standard programming format includes the flexibility of arrays, structures and libraries
- Flexible, general purpose digital and analog I/O to satisfy cost-sensitive motion control applications with a single integrated package
- Advanced feedback capabilities including absolute and high-resolution encoders

Network Connectivity

DeviceNet, DF-1 Standard



Ultra5000 Motor Performance Range

Speed	0-6000 RPM
Continuous Torque	0.2-10.2 Nm (1.5-90 lb.-in.)
Peak Torque	0.5-27.1 Nm (4.3-240 lb.-in.)

8720MC High Performance Drive

For High Power AC Servo and Spindle Applications

- 5.5 to 93kw AC servo/spindle motors
- PM synchronous or induction motor operation
- Analog or SERCOS (Early 2002) command interfaces
- Energy efficient line regeneration
- Drive support for 15,000 rpm 4 pole motor speeds
- 4 million counts of feedback resolution
- 100 hz velocity loop bandwidth

8720MC Motor Performance Range

Speed	0-9,000 RPM
Continuous Torque	35-590 Nm (26-435 lb.-in.)
Peak Torque	53-890 Nm (39-656 lb.-ft.)

Servo Motors

MP-Series Servo Motors

High performance and low inertia servo motors for use in applications that require maximum motor efficiency and fast acceleration and deceleration

- Extremely high torque in a small package
- Integral brake option
- 230 and 460 volt
- 1.6-60 Nm
continuous stall
torque
- Up to 5000 rpm
- Available with absolute
high resolution feedback
and smart motor technology



1326AB Servo Motors

Medium inertia servo motors for use in applications that require moving large loads with smooth performance

- 2.7-50 Nm continuous torque
- Up to 7250 rpm
- Available with high resolution feedback (460V only) and smart motor technology



1326AS Servo Motors

Low inertia servo motors for use in applications that require fast acceleration and high peak torque

- .7-49 Nm continuous torque
- Up to 6200 rpm
- 460V



H-Series Servo Motors

Low inertia servo motors for use in applications that require fast acceleration

- .5-50 Nm continuous stall torque
- Up to 6000 rpm
- Available with incremental encoder feedback
- 230V



F-Series Servo Motors

Medium inertia servo motors for use in applications that require moving large loads smoothly

- Match large load inertia
- Smooth operations
- 3.5-28 Nm continuous stall torque
- Up to 4000 rpm
- Available with incremental encoder feedback
- 230V



Y-Series Servo Motors

Small, low-inertia servo motors for use in applications that require quick acceleration

- .17-2.5 Nm continuous stall torque
- Up to 4500 rpm
- 230V
- Available with incremental encoder feedback



N-Series Servo Motors

NEMA flange low-inertia servo motors for use as stepper replacements

- .18-5.3 Nm continuous stall torque
- Up to 7000 rpm
- Available with incremental encoder feedback
- 230V



W-Series Servo Motors

Stainless steel washdown brushless servo motors provide low inertias for fast accelerations and a rugged design especially suited for harsh or high-hygiene environments

- 1.7-7.2 Nm continuous stall torque
- Up to 3000 rpm
- Available with incremental encoder feedback
- 230V



Selection Chart

Motion Control

	1394 with ControlLogix	1394 with SoftLogix	1394 GMC/GMC Turbo	1394 Digital Servo
Total # of Axes per Controller	32	8 Physical; 32 Total	4; 64 with AxisLink	4
RSLogix Programming	X	X		
GML Programming			X	
HIM Programming				X
Ultraware Programming				
C Programming				
100 to 240 VAC Single-Phase Input				
380 to 460 VAC Three-Phase	X	X	X	X
CE Compliance and UL Rating	X	X	X	X
SERCOS Connectivity	X	Future		
DeviceNet Connectivity (drive)				X
DeviceNet Connectivity (controller)	X	X		
EtherNet/IP Connectivity (controller)	X	X		
ControlNet Connectivity (controller)	X	X		
Motors	1326AB 1326AS MP-Series	1326AB 1326AS MP-Series	1326AB 1326AS MP-Series	1326AB 1326AS MP-Series

Ultra3000 with ControlLogix	Ultra3000 with SoftLogix	Ultra3000 Digital Servo Drive	Ultra5000 Intelligent Positioning Drive	8720MC High Power Drive
32	8 Physical; 32 Total	1	1.5	1
X	X			
				X
Optional	Optional	X	X	
			X	
X	X	X	X	
X	Future	X	Future	X
X	X	X	X	X
X	Future			Future
X	X	X	X	
X	X			
X	X			
X	X			
MP-Series Y-, F-, H-, N-, W-Series 1326AB Motors	MP-Series Y-, F-, H-, N-, W-Series 1326AB Motors	MP-Series Y-, F-, H-, N-, W-Series 1326AB Motors	MP-Series Y-, F-, H-, N-, W-Series	8720SM

Expand Your Solution with More Products from Rockwell Automation



Allen-Bradley



For information on any of the following product types, please contact your local Rockwell Automation sales office or Allen-Bradley distributor: Drives • Motors • Industrial Controls • Power & Energy Management • Power Products • Safety Components • Sensors • Software

Implement Manufacturing Projects Faster, at Lower Costs

The Rockwell Automation offering doesn't stop with products. Rockwell Automation Global Manufacturing Solutions provides a full range of services to support your organization everywhere you look.

- Superior Customer Support
- Comprehensive Asset Management
- Effective Training and Organizational Performance
- Innovative Software Development
- Results-oriented Services Consulting

Today at Rockwell Automation Global Manufacturing Solutions, we're helping customers around the globe develop and maintain the competitive edge required in demanding business environments. As the recognized leader in Completed Automation solutions, we're helping customers cut costs and increase uptime, while improving agility and enhancing total operational efficiencies along the way.

In fact, we provide everything from integrated engineering solutions that cut across traditional multi-vendor boundaries, to software and asset management services that bring manufacturing systems to new heights. So no matter what level of service or support your business requires, we can engage in a way that's just right for you.

For more information on how our world-class organization can help you achieve your business goals, visit our Web site:

www.rockwellautomation.com/gms or contact your local Rockwell Automation sales person or Allen-Bradley distributor.



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