

ProcessLogix Process Control System

Features

The ProcessLogix Process 208.Control System offers:

- A fully-integrated solution from the server through the controller, I/O, and network layers
- A powerful process development environment that uses a “drag and drop” function block editor
- A complete library of process functions including Boolean, logic (value conditioning, comparison, state, selection), and utility, auxiliary, I/O, regulatory, and sequential control blocks
- Uses Sequential Control Modules for basic batch functions
- Uses **RSBatch** when additional batch process and recipe management functionality is required
- Provides operators with smart displays, including operational procedures, and a comprehensive set of alarms

Redundant Control

Critical applications often call for redundant system components. The ProcessLogix system can be expanded to include redundancy where it is desirable. Redundancy reduces the risk of process shutdown due to single component failure. ProcessLogix system designers can selectively choose to make networks, servers, and controllers redundant. Redundancy modules (catalog number 1757-SRM) installed in the chassis communicate over dedicated fiber-optic cable as shown on [page 10-4](#).

Communication

The ControlNet network provides the primary communication link between the ProcessLogix system server, controller, and I/O modules. An Ethernet network is used to support connections between operator workstations and the ProcessLogix servers as shown on [page 10-4](#).

Specifications Class I Div 2 Hazardous

These specifications apply to the ProcessLogix process controller module as well as all other ProcessLogix hardware with the exception of individual I/O modules and the ControlNet hardware.

Shock	Operating: 5 g (½ sine, 30 msec) Non-operating: 20 g (½ sine, 30 msec)
Vibration	Operating: 10-60 Hz 0.1 inch peak-to-peak displacement. 0.5 g peak acceleration Non-operating: 0-60 Hz 1 inch peak-to-peak displacement. 1 g peak acceleration
Environmental Conditions	• Operating: 0 to 60° C (32 to 140° F) • Non-operating: -40 to 85° C (-40 to 185° F) • Relative humidity: 5 to 95% (without condensation)
Battery (for 1757-PLX52)	• 1757-BEM • 1757-PLXBAT
Weight (1757-PLX52) (1757-SRM)	0.5 kg (1.09 lb) 0.45 kg (1 lb)

System Requirements

The following table lists minimum system requirements for the ProcessLogix server (catalog number 1757-PLXC).

Processor	Pentium Pro 200
Memory	64M bytes (128M bytes if redundant)
Hard Disk	2 Gbytes
Display Resolution	1024 × 768; 256 colors
Operating System	Microsoft Windows NT v4.0 with Service Pack 3.0
Network Protocols	TCP/IP, NFS
CD-ROM Drive	8x
Peripherals	Keyboard, mouse, mini-cartridge tape drive
Software	RS LinX software communicates with ControlNet devices

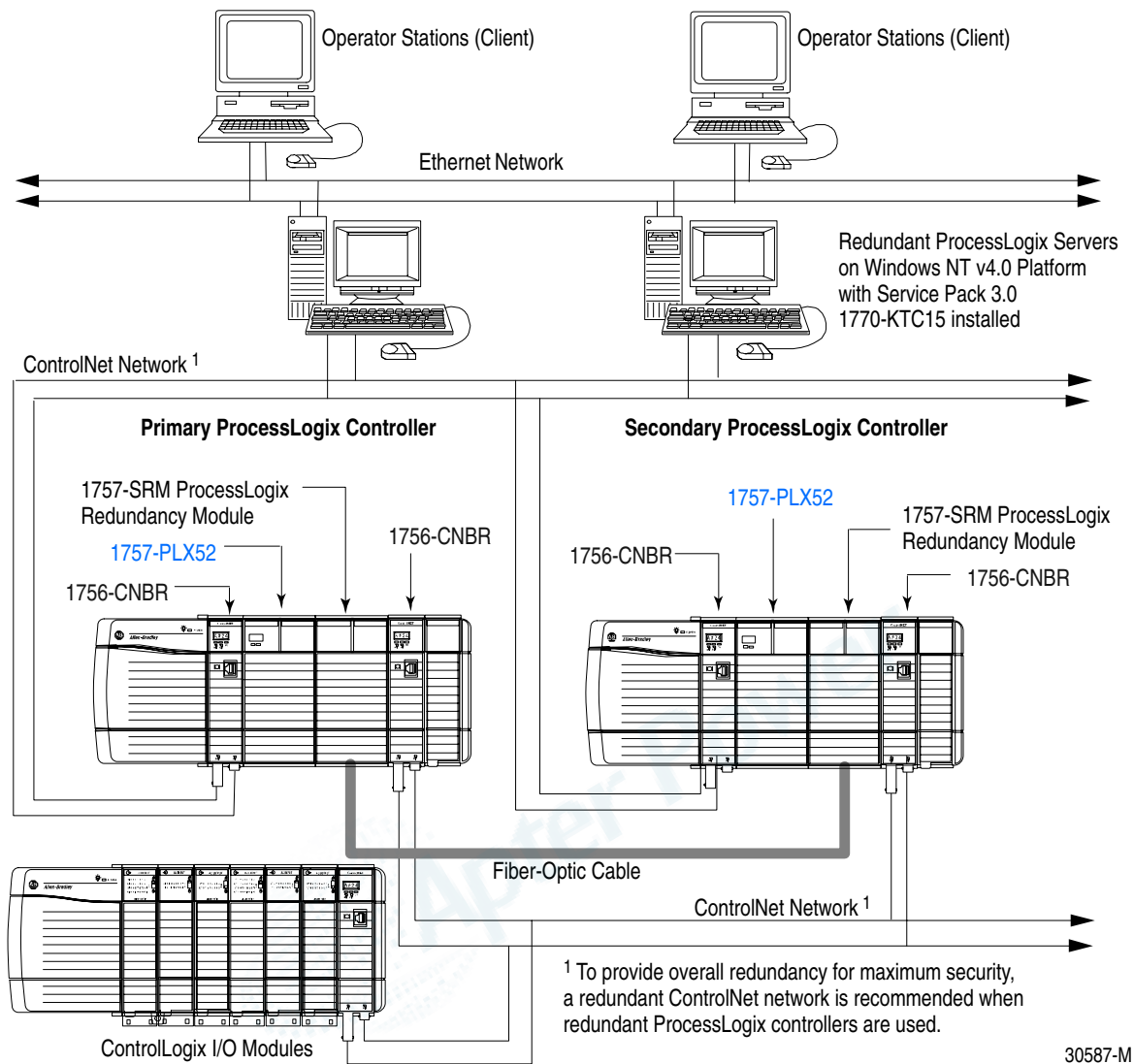
The following table lists system requirements for the ProcessLogix client.

Processor	Pentium Pro
Memory	64M bytes
Hard Disk	850M bytes
Operating System	Microsoft Windows NT v4.0 with Service Pack 3.0 or Windows 95
CD-ROM Drive	8x
Peripherals	Keyboard and mouse

For a ProcessLogix products guide, see [page 10-5](#).

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Typical Configuration²⁰⁹.



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ProcessLogix Products Guide210.

Many of these products such as the chassis are covered in the Logix5550 / ControlLogix System section of the catalog. So there are many page references to that section as a source for more information.

Product	Function	Catalog Number
Process Controller Module and Redundant Components		
ProcessLogix Process Controller Module	Two-slot module that supports non-redundant and redundant controller configurations. If the primary 1757-PLX52 controller module fails in a ProcessLogix system, another 1757-PLX52 controller module will take over the assigned functions. (Does not support removal and insertion under power.)	1757-PLX52
Spare Battery	Use the Process Controller Module's battery only when power is continuously maintained on the chassis—without frequent interruptions. This battery is not rechargeable and must be replaced periodically.	1757-PLXBAT
Battery Extension Module	Provides power to the ProcessLogix 1757-PLX52 controller to maintain its user configuration in the event of rack power failure. Use this module only when power to the chassis is frequently interrupted. It comes with a rechargeable battery. When using the 1757-BEM, remove the controller battery (1757-PLXBAT).	1757-BEM
ProcessLogix Redundancy Module	Two-slot module that provides a fully-redundant chassis. Synchronization of primary and secondary process controller modules is completely transparent to users, with minimal control switchover time in the event of a system failure. (Does not support removal and insertion under power.)	1757-SRM
Fiber-optic Redundancy cables for redundant controller module (1757-SRM)	1 meter	1757-SRC1
	3 meters	1757-SRC3
	10 meters	1757-SRC10
ProcessLogix Server		
Personal Computer	Supports ProcessLogix Server functionality for all applications (example: 5 stations, databases with more than 2,000 points, advanced control or other applications, extra high-speed data acquisition). In a redundant system, you need a second server linked to the primary server and used as a backup system. Active linking ensures that the data in the secondary server is constantly updated to mirror the primary server. You must purchase a ProcessLogix Server Software License.	1757-PLXC
Monitor	High-Resolution 17-inch monitor	1757-PLXCRT
Chassis		
All I/O modules and the Redundancy Module can be removed and inserted under power but only when the equipment is installed in ordinary, non-hazardous locations.		
See page 6-8	4-slot	1756-A4
	7-slot	1756-A7
	10-slot	1756-A10
	13-slot	1756-A13
	17-slot	1756-A17
Power Supplies		
Power supplies do not take up a chassis slots.		
See page 6-21	120/220V ac, 95 Watts	1756-PA72
	24V dc, 97 Watts	1756-PB72
Communication Modules		
ControlNet Communication Interface Module (Non-redundant), page 6-19	Links the process controller with one of two (non-redundant) ControlNet process control networks	1756-CNB
ControlNet Communication Interface Module (Redundant), page 6-19	Links the process controller with one of two (redundant) ControlNet process control networks	1756-CNBR
ControlNet RS-232-C Personal Computer Interface, page 12-23	Lets you connect devices to a ControlNet network that do not have the capability to communicate directly on a ControlNet network	1770-KFC15

(continued)