

620 Logic Controller

In the 620 LC, Honeywell offers a comprehensive line of "system solutions" designed to integrate your control, monitoring and communications operations into a single plant-floor package. The product line is anchored by four processors, a universal I/O system and a versatile programming platform. A full range of compatible peripheral devices provide specialized control, networking and operator interface.

Fundamental in 620 LC "system" architecture is the Divided Task philosophy built into every component.

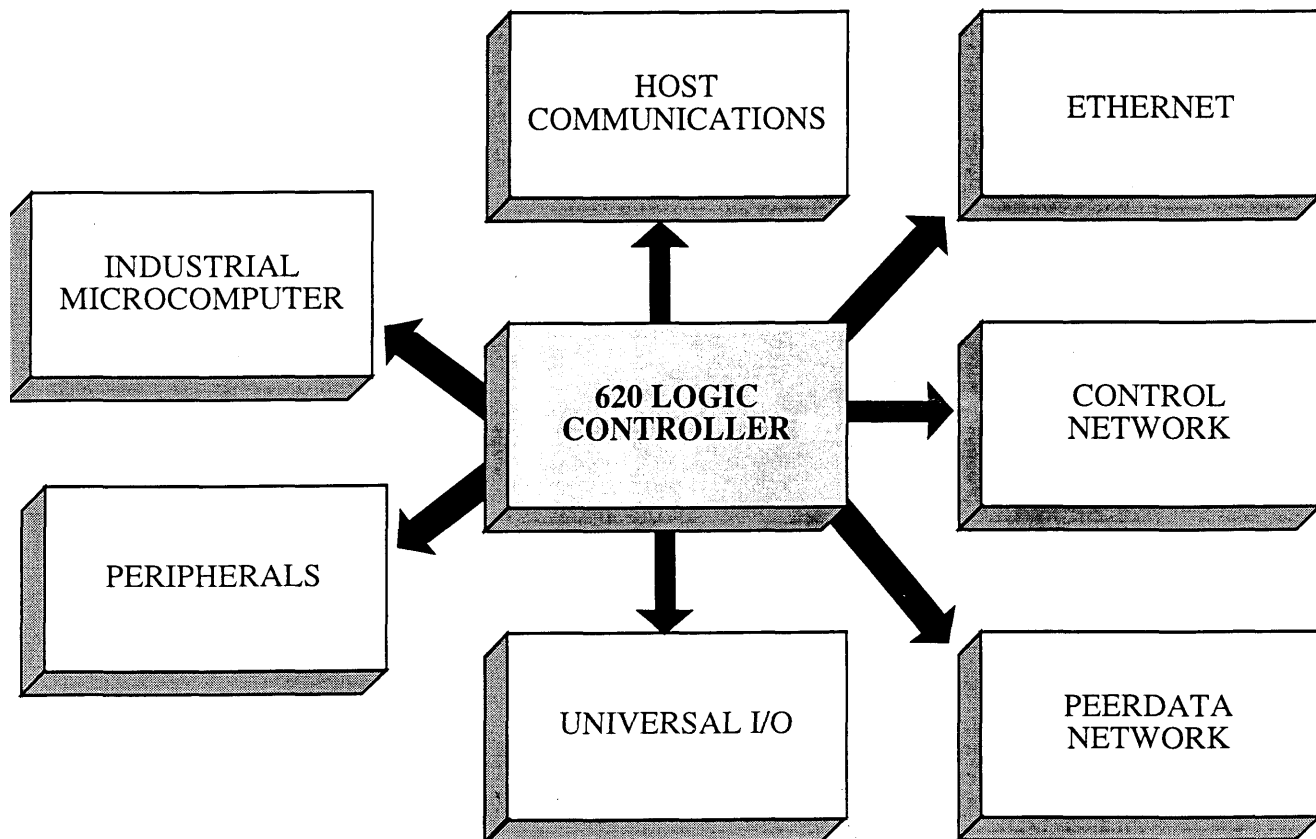
This synergistic method of product design dramatically enhances the interaction between system components.

All 620 LC products are divided into logical hardware and software processing segments for distributed control among various processors within the system. The results are easily recognized:

- Since it is divided into segments, the control system can be designed and software can be written in segments for *ease of use*.

- Installation and debugging procedures can be performed in stages, thus *saving time*.
- Since control functions are divided into smaller tasks and assigned to various processors, processing *speed is increased*.
- Distributed control means *distributed risk*. Divided task design means the whole process line won't shut down if one segment is lost.
- Many 620 models now meet CE mark specifications. The suffix "C" has been added to those models that do.

Divided Task Principle



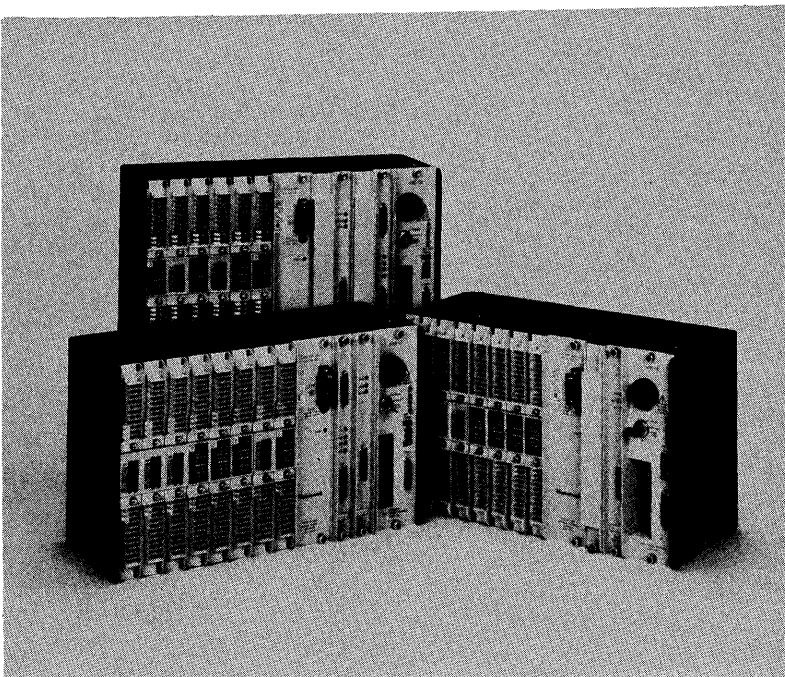
620 Logic Controller

The Honeywell 620 Logic Controller product line has stood for quality and reliability in logic control for nearly a decade. As your logic control requirements have grown, our complete line of 620 Logic Controller (LC) has evolved to meet every challenge — from simple relay replacement to high-speed, math-intensive processing. Now three new 620 LC processors comprise the “third generation” of 620 Logic Control — uniquely designed to offer logic solutions to the growing number of industries that utilize a combination of process, hybrid and discrete control capabilities.

Formerly known as the IPC 620 Programmable Logic Controller, the 620 LC merges traditional 620 performance with a strategic market focus. The product line evolution reflects our continuing commitment to deliver proven logic control to specific markets that tie together Honeywell's expertise in all segments of industrial control technology — from dock to dock and from the sensor to the boardroom. We're focusing our flexible 620 solutions to meet your emerging requirements of the 1990s.

The 620 LC underscores Honeywell's energetic commitment to its comprehensive line of small systems. The 620 LC is the key component of the Honeywell family of small systems designed to help your process achieve **Manufacturing Competitiveness.**

Whether your goal is higher yield, better quality or reduced waste, the 620 LC can help you squeeze incremental profits out of your automation strategy.



620 Logic Controller

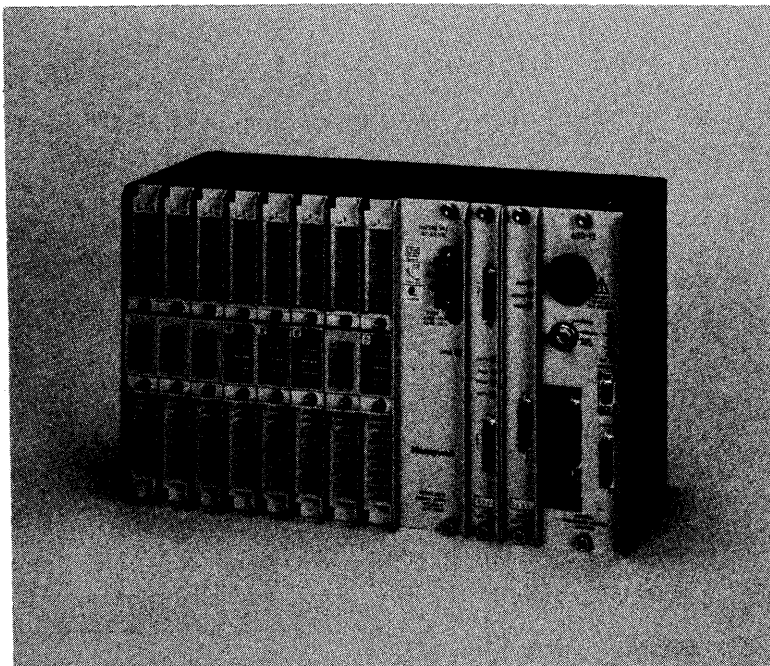
Three Levels of Processing Power

The heart of the 620 Logic Controller consists of three processors, each with specific memory size, I/O capabilities and processing functions that make the system ideally suited for almost any industrial application. The processors represent the third generation of 620 development, each reflecting operating enhancements yet compatible with the rest of the product line. All processors share a common instruction set.

620-12 — Basic Functionality for Small-to-Midrange Applications

The 620-12 is our general-purpose small logic controller that is especially cost-effective for simple ON/OFF applications requiring up to 256 I/O. But it offers countless benefits over many "Micro-PLC" products on the market, such as I/O capability, peer-to-peer networking and data collection communications and display.

The 620-12 is a single-module processor that supports parallel I/O located as far as 100 feet (30.48 meters) away.



620-12 LC

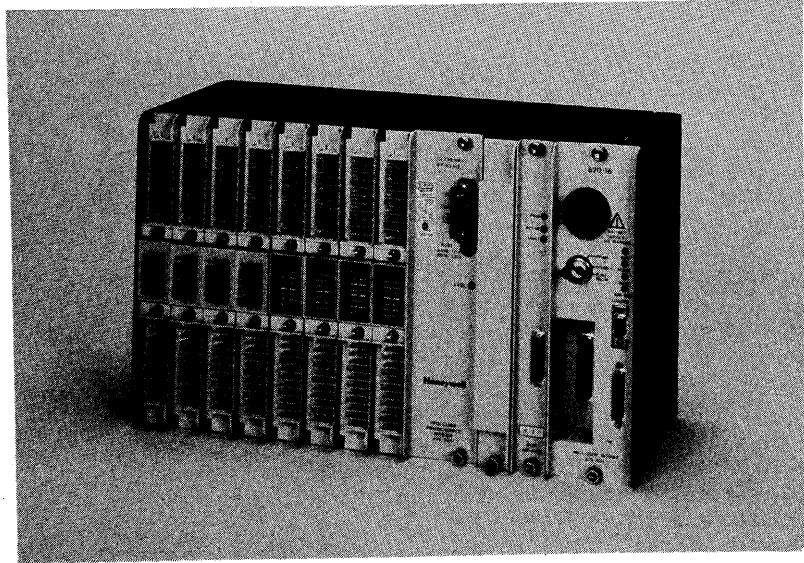
620 LC PROCESSOR FEATURE				
620 LC Processors	Memory Size	I/O Capacity	Relay Inst. Scan Time	Math Capability
Model 620-12	2K	256	2.5 ms per K	Floating Point, Signed Integer*
Model 620-16	8K	1024	2.5 ms per K	Floating Point, Signed Integer"
Model 620-36	32K	2048	2.5 ms per K	Floating Point, Signed integer*

*Twos complement and unsigned integer.

620-16 — Advanced Control for Midrange Applications

This processor is designed for midsize applications that require high-speed processing and advanced floating-point math functions and built-in, binary-to-digital conversion. The 620-16 has an 8K memory capacity and is extremely versatile because of built-in communications ports that expand the system's data networking capability.

Input/output capacity is 1024. The 620-16 provides serial I/O communications with a wide variety of remote I/O.

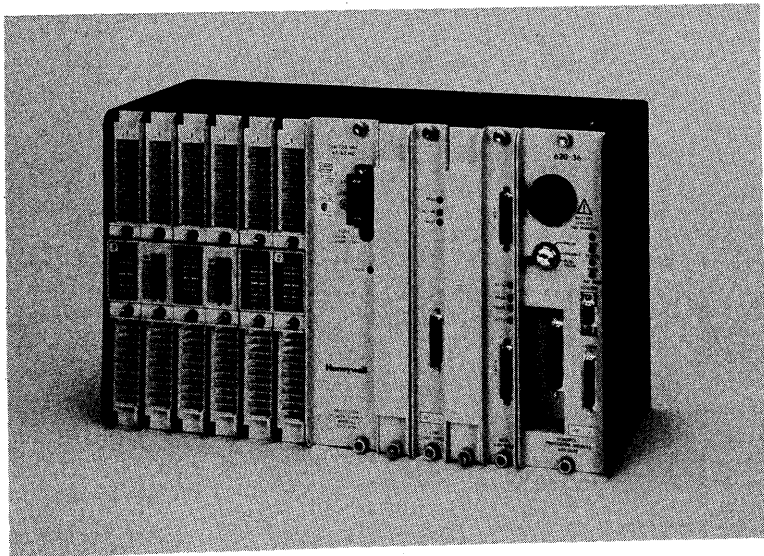


620-16 LC

620-36 — Solution for Large, High-Speed Control Challenges

The 620-36 extends the product line with extensive memory, processing and communications capabilities. The single module processor offers up to 32K of user memory and a 2.5 ms/K scan time for speed-critical applications.

Both parallel and serial I/O communications in local and remote configurations are supported by the 620-36.



620-36 LC

A Wide Range of 620 Universal I/O Modules Means Versatile Solutions for Any System

The entire 620 LC is serviced by a single, universal I/O system with a wide range of functionality compatible with all three processors. This versatile 621 I/O system includes three types of configurations, three point sizes and functional capabilities to meet the needs of any application.

Remote and Local I/O Options Available

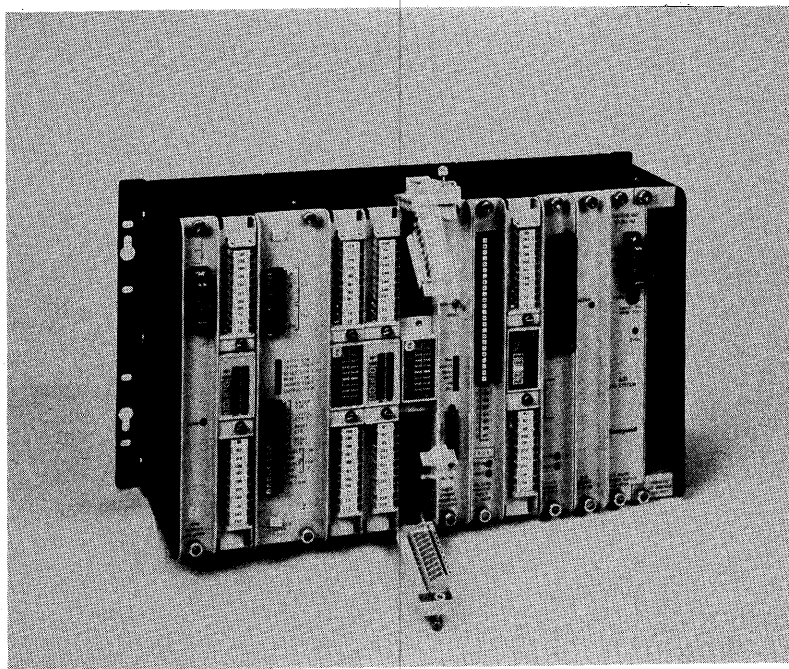
The 621 I/O system includes three basic configurations:

- *Local I/O* housed in the processor rack.
- *Parallel I/O* housed in racks that can be located up to 100 feet (30.48 meters) from the processors. This configuration aids flexibility and optimizes scan time.
- *Serial I/O* housed on one of four communications links up to 10,000 feet (3048 meters) from the processor. This configuration, available in the 620-16, and 620-36 expands flexibility plantwide. Serial and parallel I/O can be combined in a single system.

Three Point Sizes Let You Decide

The 621 I/O system includes 8-, 16-, and 32-point digital I/O, allowing you to build your control strategy with maximum flexibility. The 32-point modules permit you to concentrate the greatest number of control points in one area, while 8- and 16-point modules let you distribute your control more widely for added process security.

All three types of modules can be installed in the same 19-inch rack sizes as the processors, or in half-racks for greater distribution and installation in tight spots. Each 8- and 16-point module is equipped with a terminal block set which cuts the size of each module's field wiring bundle in half, and locks open for easy replacement or removal. Our 32-point I/O are equipped with easy-to-remove phoenix connectors.



621 Universal I/O

Wide Range to Suit Any Application

The 621 I/O system features cost-effective digital input and output modules ranging from 240 Vac to 5 Vdc. "Smart" or special function I/O modules include:

- Analog (in/Out)
- High-Speed Counter
- Pulse Quadrature
- Servo Control
- 24 Vdc Sink Input/Source Output
- BCD Converter
- MiniCOP Microcomputer
- Reed Relay
- Thermocouple
- ASCII Communications
- Pulse Input
- Servo Axis
- Enhanced Diagnostic
- Absolute Encoder