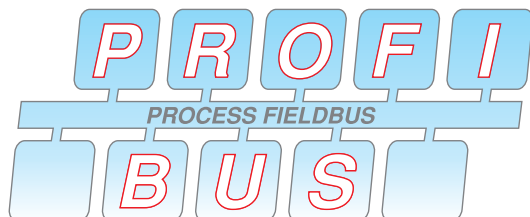
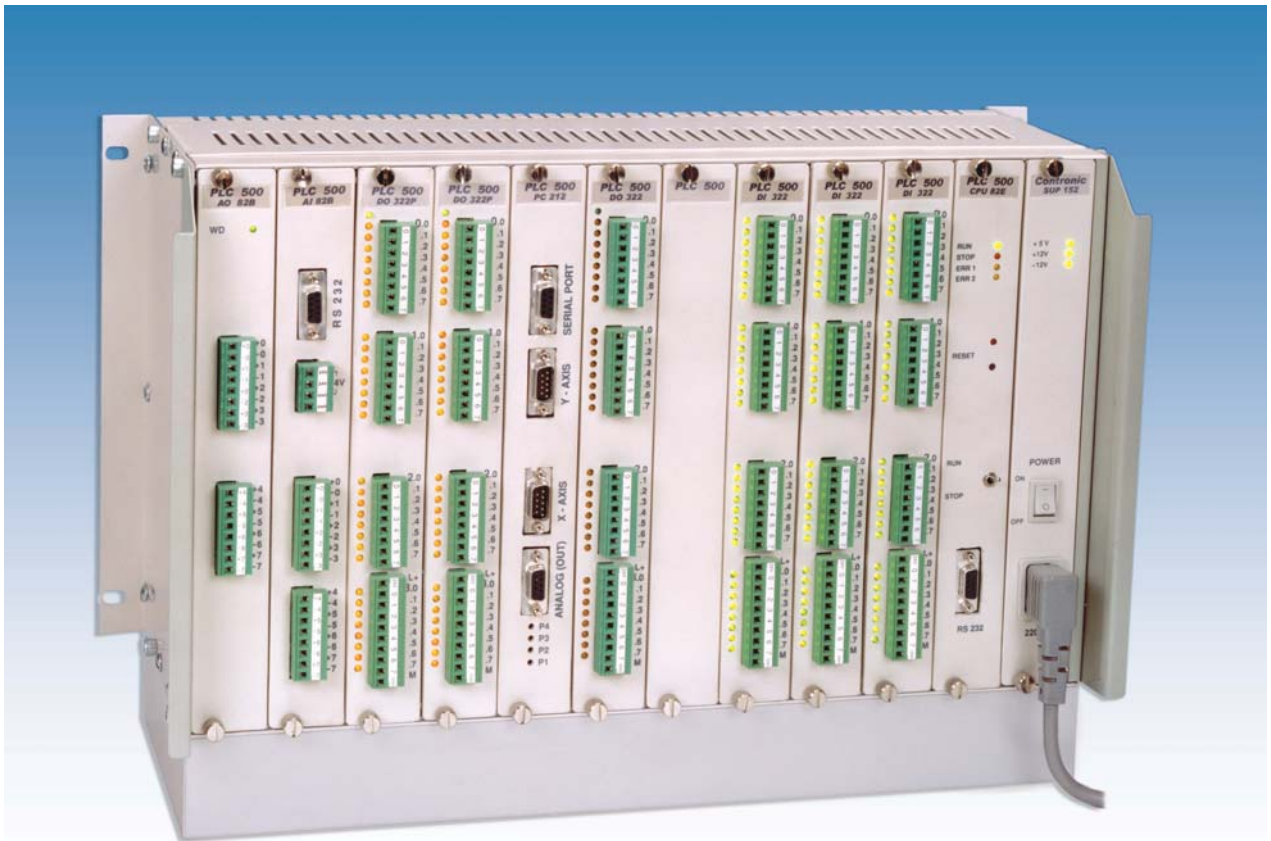


# Contronic

## PLC 500 Series

### A Growing Generation



**Reliable, Expandable, Powerful**  
**Catalog 2003-1383**

# Contronic

## PLC500

### Contineous Innovation

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#### Overview

- PLC500 offers maximum performance and minimum cost
- Simple installation and programming
- Diverse range of peripheral modules
- Expandable, several thousands of digital and analog inputs and outputs can easily be installed in expansion racks
- Distributed Configuration main and expansion racks may be distributed several hundred meters apart, greatly minimizing wiring costs
- State of the art Networking capability, using profibus technology
- Redundancy, cpu and power supply redundancy is available for such critical tasks that need very high availability and fault-tolerance

#### Applications

PLC500 is a configurable, expandable controller intended for automation tasks in the medium and high performance levels. These controllers provide a simple and economical solution for open-loop and Closed-loop control tasks.

#### Construction

All electronic modules including power supplies, CPUs, intelligent peripherals, Communication processors and I/Os are built as one-slot modules that can easily be inserted to and removed from racks in few seconds. Every module includes a plastic front plate and two locking screws that safely lock the units to the rack. Operation of each unit and states of all incoming and outgoing signals can be monitored by appropriate light signals installed on front plates.

#### PLC500 series are suitable for:

- Machine control systems
- Process automation
- Process monitoring

### Technical specifications

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● Storage temperature	0 to 75°C	● Timers	48(CPU 82) 250(CPU 162)
Ambient temperature	0 to 50°C	Extended Pulse, Stored On Delay, Pulse, On Delay and Off Delay	
Atmospheric pressure	900 to 1070 hpa	● Internal relays	4096 F + 4096 M (bit memories)
Relative humidity	5 to 95% Non-con.	● <b>Modules</b>	
● Program memory	42 Kbytes (CPU82) 196 Kbytes (CPU162)	CPU 162	
● Program backup	maintenance-free FLASH memory	CPU 82	
● Data backup	maintenance-free rechargeable battery	PS 152	Power Supply
● Backup time	180 days (minimum)	AI 82A	8-ch Analog Input
Battery life time	10 years (minimum)	AO 82B	8-ch Analog Output
● Isolation	Between inputs/ outputs to internal circuitry 600v dc	DI 322	32-ch Digital Input
● Degree of protection	IP 20 in accordance with IEC529	DO 322	32-ch Digital Output
● Power supply	220V ac	PC 212	2- ch Position Controller
● Counters	48 (CPU 82) 100 (CPU 162)	PC 52A	4-ch Fast Counter
		CPI 602	Communication Controller
		EP 102	Expansion Rack Controller
		COM-FMS	Profibus-FMS Master Intf.
		COM-DPM	Profibus-DP Master Intf.
		COM-DPS	Profibus-DP Slave Interface

# Contronic

## PLC500

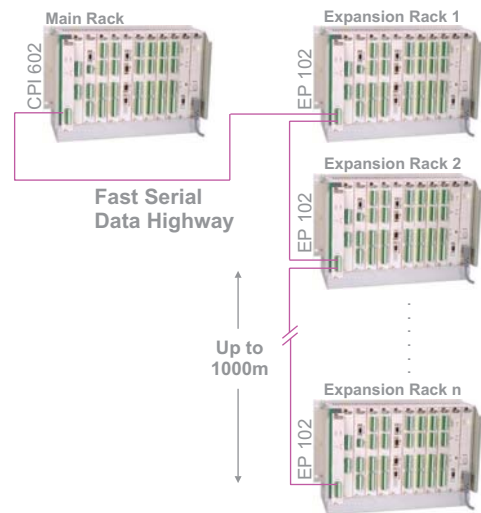
### Designed for Expansion, Redundancy and Networking

#### Expansion

In large industrial process control system where, several hundred or thousands of inputs and outputs are involved, a single rack cannot accommodate all the modules. In such circumstances PLC500 can be expanded using "Expansion Racks" and "Expansion Modules". CPI602 and EP102 modules make such large configurations feasible using fast serial Data Highways. High-speed serial communication network for expansion system of PLC500 series conforms to the industry standard EIA RS-485 Differential Bus Transceiver Multipoint interface.

For maximum flexibility internal electronic circuits are isolated from physical layer of the bus data highway. This added feature makes it feasible to distribute expansion racks several hundred meters apart from main rack and from other expansion racks.

Distribution of expansion racks minimizes system complexity and costs to a great extent, as there is no need to conduct all wires to a centralized control system.



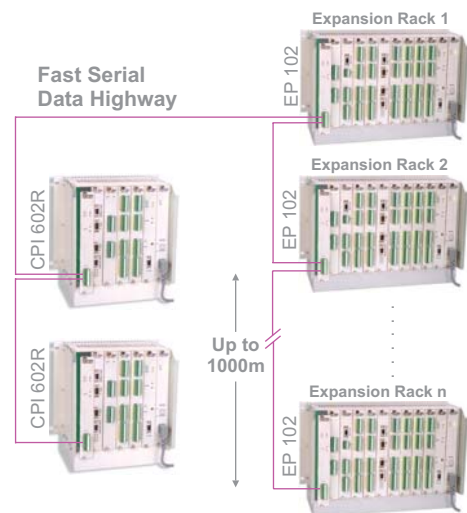
#### Redundancy

CPU and Power Supply redundancy can be achieved by using CPI602R modules installed in two redundant Main Racks.

Both CPUs execute the Control Program independently and simultaneously but one of them controls the process. Both CPUs interact and check each other cyclically. If the controlling CPU fails, the redundant CPU overrides and continues the process in a bump-less manner.

Some very critical inputs and outputs that need redundancy can also be duplicated and installed in the Main Racks.

Ordinary input and output modules will be installed in expansion racks.

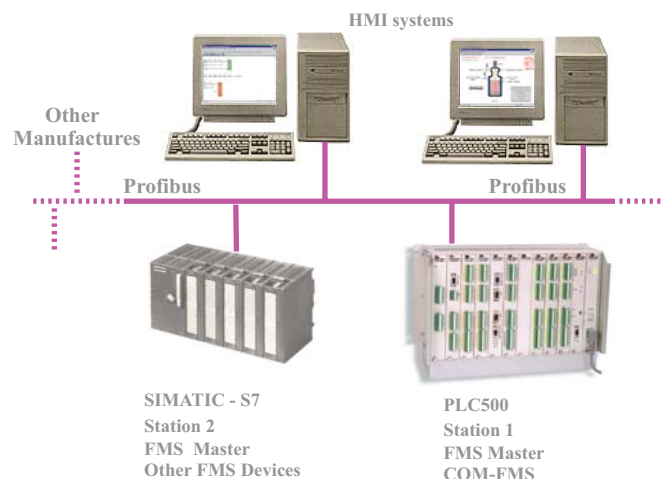


#### Industrial Networks

Profibus is the most widely used industrial networking protocol adopted by many international vendors.

Profibus supports data and message transfer between devices ranging from process monitoring and control computers and large control systems to simple passive inputs and outputs.

PLC500 series supports profibus industrial networks as well. Using COM-FMS, COM-DPM and COM-DPS network modules PLC500 can be configured as FMS master, DP master or DP slave and share data with other controllers and devices from other manufacturers supporting this protocol.

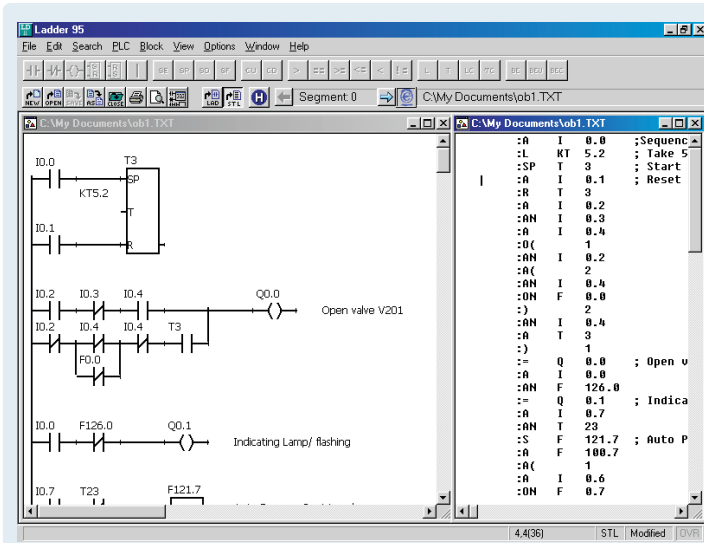


# Contronic

## PLC 500 Series

**Expandable and Powerful for Medium to Large Processes**

Complete with diverse range of peripheral modules especially designed for high performance range.



### Ladwin Software

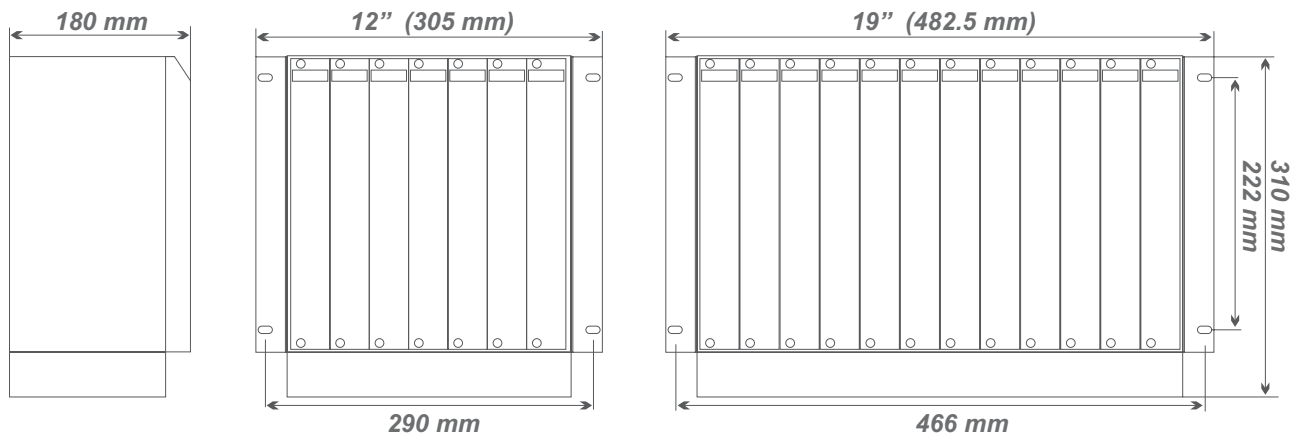
Programming PLC500 is a joy on a Personal computer running LadWin.

LadWin provides a comprehensive, graphical programming environment where, you can design your applications in popular Ladder and STL languages.

Thanks to the MDI capability (Multi-Document Interface), the user can design and debug several programs simultaneously.

Technical support  
Training courses  
After sales services

**By Contronic**



**We are easily accessible**

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