



®

ROCK SOLID PERFORMANCE. TIMELESS COMPATIBILITY.

Compact

2500 Series® Compact Programmable Automation Control System



OVERVIEW

The 2500 Series® Compact PAC System delivers all of the performance and reliability of the 2500 Series® Classic System in a significantly smaller form factor. Featuring the same programming software and instruction set, and the same communication, remote I/O and data sharing protocols, the 2500 Series® common architecture allows Compact System users to get up to speed quickly using existing tools and diagnostics and to integrate Compact Series products with other 2500 Series® products easily.

The 2500 Series® Compact System includes a wide range of digital, analog and specialized I/O modules, power supplies, and bases. These products work seamlessly with Classic 2500-Cxxx processors, the new Compact 2500C-Cxxx processors (coming soon), as well as Simatic 545 and 555 processors to manage everything from small discrete control applications to large process applications with PID loops, alarms, and special mathematical functions. The CTI approach to automation emphasizes continuous evolutionary improvement, compatibility across successive product generations and operational simplicity to help customers optimize plant performance at the least possible cost.

Small Package, Big Performance

The 2500 Series® Compact PAC system provides the same functionality found in many larger systems, but in a smaller form factor and at a lower cost. The 2500 Series® Compact PAC system is fully compatible with all other 2500 Series® products, ideal for mixing and matching products from various product lines to best meet application requirements.

Whether you're building a machine or a new process control system, the 2500 Series Compact® PAC System offers:

- **Full-featured performance supporting up to 8192 I/O points**
- **Rugged metal industrial platform—no plastic**
- **Advanced functionality**
- **Hot swappable modules**
- **Multiple remote I/O network options**
- **Easy connection to other 2500 Series® products**
- **Software configuration of I/O modules from the PLC**

FUTURE DEVELOPMENT

- Coprocessor modules providing high volume data management and communication with major industrial Ethernet protocols
- Support for redundancy in power supplies, remote base controllers and CPUs

2500 Series Compact Programmable Automation Control System

Type of Product	Model Number	Description	Features
Processor	2500C-C200*	CPU with 256K User Memory	64 loops, 128 alarms, 2048 digital / 1024 analog I/O
Processor	2500C-C300*	CPU with 512K User Memory	512 loops, 512 alarms, 8192 digital / analog I/O
Base	2500C-R4	Four-slot Base	High-speed data channel transfer supported
Base	2500C-R8	Eight-slot Base	High-speed data channel transfer supported
Base	2500C-R16	Sixteen-slot Base	High-speed data channel transfer supported
Blank	2500C-SSB	Single slot Blank	Cover unused slots in the base
RBC	2500C-RBC-PRF	Profibus Remote Base Controller	Communication speeds up to 12Mbaud
RBC	2500C-RBC-RS485	RS485 Remote Base Controller	Up to 15 remote bases can be attached to CPU
Power Supply	2500C-PS-120V-35	35-Watt AC Power Supply	85-264VAC, 47-63Hz input, 100mSec holdup time
Power Supply	2500C-PS-125V-35	35-Watt DC Power Supply	85-125VDC input, 83mSec holdup time
Power Supply	2500C-PS-24V-35	35-Watt Power Supply	20-30VDC input, 100mSec holdup time
Digital Input	2500C-8-IDI-24V	8 Isolated 24V AC/DC Inputs	10-30V AC/DC voltage inputs, hot swapping
Digital Input	2500C-8-IDI-120V	8 Isolated 120/240V AC/DC Inputs	79-132V AC/DC or 164-265 VAC, hot swapping
Digital Input	2500C-16-IDI-24V	16 Isolated 24V AC/DC Inputs	10-30V AC/DC voltage inputs, hot swapping
Digital Input	2500C-16-IDI-120V	16 Isolated 120V AC/DC Inputs	79-132V AC/DC voltage inputs, hot swapping
Digital Output	2500C-8-IDO-24V	8 Isolated 24VDC Outputs	11-30VDC output voltage, hot swapping
Digital Output	2500C-8-IDO-120V	8 Isolated 120/240VAC Outputs	79-265VAC output voltage, hot swapping
Digital Output	2500C-16-DO-24V	Sixteen 24VDC Outputs	11-30VDC output voltages, hot swapping
Digital Output	2500C-16-DO-120V	Sixteen 120/240VAC Outputs	79-132VAC output voltages, hot swapping
Analog Input	2500C-8-AI	8 Analog Inputs	Wide input ranges, no user calibration
Analog Output	2500C-8-AO	8 Analog Outputs	Wide output ranges, no user calibration
I/O Connector	2500C-32F	32-Pin Field Wiring Connector	Accepts 14-22 AWG wires, up to 6A @300VAC
I/O Connector	2500C-32F-CJC	32-Pin Field Wiring Connector w/ Cold Junction Compensation	Accepts 14-22 AWG wires, up to 6A @300VAC
Specialty I/O	2500C-4-HSC	4-Channel High Speed Counter	Operates in frequency, period or counter mode
Relay Output	2500C-8-RL-FC	8-Point Form-C Relay Outputs	Up to 5A output current per channel
Temperature Inputs	2500C-8-RTD	8 RTD Inputs	Supports 2,3 and 4 wire RTDs, no user calibration
Temperature Inputs	2500C-8-TC	8 Thermocouple Inputs	Supports J, K, T, E, R, S, & N thermocouples and millivolt inputs

* coming soon





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SIMPLY SEAMLESS™

The CTI 2500 Series® Automation System

The 2500 Series® has a proud legacy as one of the world's premier process control platforms and is known for its capability, simplicity and reliability. CTI has modernized this legendary product line with smart enhancements and rich features to create a complete automation solution that helps our customers run their plants as safely, efficiently and seamlessly as possible.

The BLUE Platform™

CTI 2500 Series® products are built on the BLUE Platform™ — CTI's seamless systems architecture. Products built on the BLUE Platform™ are engineered with a consistent design philosophy, a common operating system and common communications protocols and interfaces. This approach ensures interoperability between various components of the system as well as between various product generations to deliver seamless operational communications and control and maximum efficiency with minimum process downtime and greatly reduced engineering development time.

Whether you choose Classic, Compact or Slice, the seamless systems architecture of the BLUE Platform™ will ensure seamless integration and powerful process control. Please contact us to learn more.

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