

## **Keep Automation Simple**with Control Technology Inc.

and keep control on the total

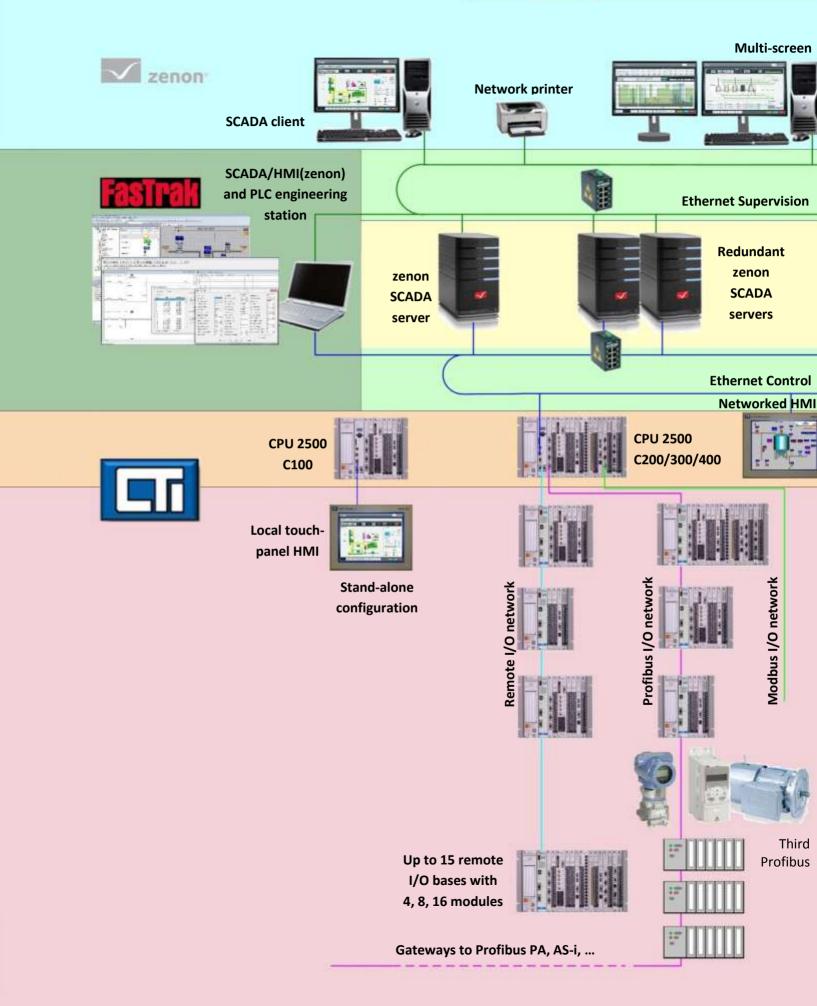
cost of ownership

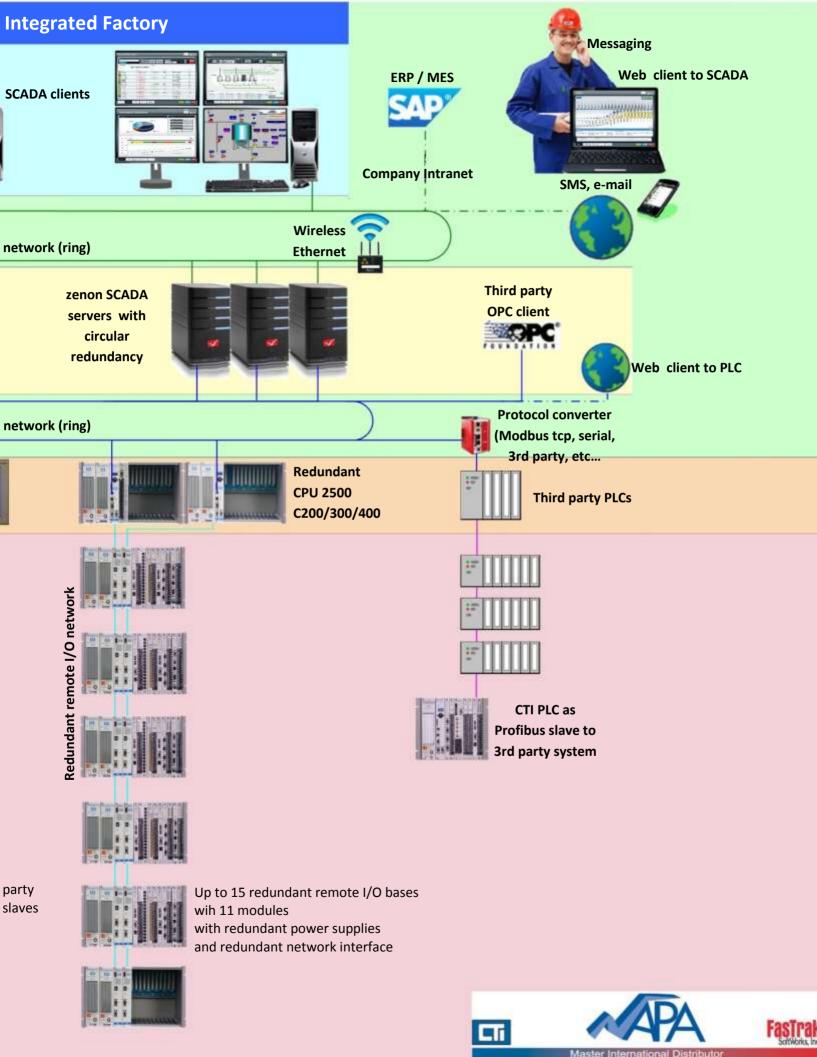




- Robust industrial PLC for process control and machine automation
- Smart and intuitive HMI/SCADA supervision
- Easy and effective programming environment
- Immediate ethernet connection
- Open and flexible field network









# CTI 2500 Series® High Performance Industrial Controllers

Located in Knoxville (Tennessee, USA) since 1987, CTI (Control Technology Inc.) specializes in the design and production of PLC systems with over 120,000 product units worldwide (19000 Ethernet connections, 45000 serial connections).

Used in process industries such as Chemicals, Pharmaceuticals, Food & Beverage, Oil & Gas, Water Treatment, Pulp & Paper, Semi-Conductors, Air Separation, Cement, Metal,... as well as more machine-oriented systems (filling machine, packaging), it offers a wide range in continuous evolution.

Dedication to excellence in customer support, to continuous improvement in our products and processes, and to responsiveness to the needs of our customers forms the basis of our corporate culture.

Our 2500 Series® PLC family is currently based on 4 CPUs using the same s/w architecture and programming languages:

CPU Features	C100	C200	C300	C400
RAM User Memory (Kb)	128	256	512	3072
Max digital I/O number	1024	2048	8192	8192
Max analog I/O number	1024	1024	8192	8192
Max PID loops	16	64	512	512
Max analog alarms	32	128	512	512
Built-in Ethernet	Programming and HMI	Programming and HMI	Programming and HMI	Programming and HMI
Built-in USB	Programming	Programming	Programming	Programming
Profibus-DP master	No	Yes (from 9.6 kbaud to 12Mbaud)	Yes (from 9.6 kbaud to 12Mbaud)	Yes (from 9.6 kbaud to 12Mbaud)
RS485 Remote I/O ports	No	Up to 15 remote bases	Up to 15 remote bases	Up to 15 remote bases
Built-in SD flash card slot for firmware upgrade	Yes	Yes	Yes	Yes
Compatibility with Siemens® 505	545-1103 *, 545-1105 *	545-1101, 545- 1102, 545-1104, 545-1106	555-1101, 555- 1103, 555-1105	555-1102, 555- 1104, 555-1106
Programming with FasTrak PLC Workshop Suite/SuperSuite <sup>™</sup>	Yes	Yes	Yes	Yes
Programming with Siemens® APT <sup>™</sup>	Yes	Yes	Yes	Yes

<sup>\*</sup> If Profibus-DP annex card is installed, a 2500-C200 must be used

### A complete range of Input/Output modules:

Discrete Inputs Module :

- 16-Points Isolated 95-132 VAC/12-56 VDC/125 VDC
- 16-Points TTL/Word Input
- 8-Points Universal Discrete Input
  - 8/16/32-Points Universal Discrete Input

#### Discrete Outputs Modules:

- 16-Points Isolated 20-132 VAC /11-146 VDC Output
- 16-Points TTL/Word Output
- 8/16/32-Points DC Output
- 8/16/32-Points AC Output
- 8-Points Form-C Relay Output
- 16/32-Points Form-A Relay Output

### Analog Inputs Module:

- 8-Channels Analog Input
- 8-Channels Isolated Analog Input
- 16-Channels Analog Input
- 8/16 Thermocouple Analog Input
- 8/16 RTD Analog Input

### Analog Outputs Modules :

- 8-Channels Analog Output
- 8-Channels Isolated Analog Output

### Mixed Analog Modules :

8 Inputs/4 Outputs Analog

### One single consistent PLC family

Fewer spare parts, Shorter training time.

I/O bases for 4, 8 or 16 Input / Output modules in a rugged metal housing.



# A PLC Series carefully designed for the process industry

- Fast scan time
- Powerful PID loop algorithm
- I/O Modularity
- Open to OPC
- Low cost of ownership.

This family is one of the longest lasting in the world!

Compatible with the TI505<sup>®</sup> and Siemens<sup>®</sup> 505 PLCs which are 25 years old, CTI constantly enriches the series with new models. adds new instructions new or features...



... and a wide choice of communication adapters and specialty modules.





2500 Series® HMI Panels are designed to allow very easy ethernet connection and configuration of HMI applications for CTI 2500 Series® PLC.

The panels are based on the latest Intel® Atom™ processor technology and they feature a highbrightness LCD panel for easy readability under industrial conditions.

They integrate easy remote access through the internet for maintenance, update download, ...

Panels are running Microsoft Windows<sup>®</sup> 7 embedded and are powered by COPA-DATA zenon<sup>®</sup> engine.

Modular licensing system allows step by step investment.

### CTI Series 2500<sup>®</sup>HMI Panel

### **Advanced supervision with CTI 2500-VP15**

- Scalable from simple local HMI panel to complete client-server architectures at the forefront of technology, from 256 to 2048 variables (HMI) or more (complete SCADA system)
- Continued innovation (about 1 new version each year). Always on the cutting edge of technology (e.g. multi-touch display ...) and responsive to market changes
- CTI driver for a dedicated optimized communication with all controllers of the CTI 2500 Series®
- Open at all levels (VBA for editor or runtime, OPC drivers for PLCs from other manufacturers ...)
- Very high availability through redundancy
- · Web server, SMS and e-mailing on alarms
- · Easy interfacing with ERP (SAP), MES ...
- Soft-PLC zenon Logic to integrate logic (IEC 61131-3) in monitoring (HMI and / or SCADA)
- · Centralized or distributed engineering of multi-projects
  - · Easy 100% object-oriented design
  - · One software for all versions, all platforms
  - Networking with Ethernet TCP / IP in a few mouse clicks
  - Online changes at all levels, propagation of changes to all platforms in a single click.
- Reduce development time thanks to:
  - Extensive symbol libraries
  - Import / export of any type of object to maximize existing projects reuse
  - Wizards to automate / standardize repetitive engineering tasks.
  - · Manuals and Online Help
- An intuitive control system for operators:
  - Powerful and flexible Alarm management and Data Archiving/Trending
  - Compliance with 21 CFR part 11
  - Integrated analysis tool for process units performance monitoring.



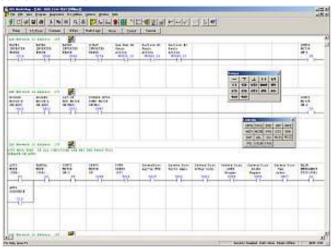
### CTI 2500 Series®: Programming Tools

### PLC WorkShop Suite<sup>™</sup> and SuperSuite<sup>™</sup>

The FasTrak PLC WorkShop Suite™ for CTI 2500 Series® provides all the tools necessary for programming CTI 2500 Series® PLCs. It supports all Windows® platforms including XP, Vista, and Windows 7.

PLC WorkShop Suite™ for CTI 2500 Series® allows you to:

- Utilize the full, enhanced functionality of the CTI 2500 Series<sup>®</sup> processors
- Easily upgrade Relay Ladder Logic from Siemens<sup>®</sup> TISOFT2<sup>™</sup> and SoftShop <sup>™</sup>
- Secure and safeguard PLC WorkShop files with FTVersionTrak PE ensuring that a backup file is readily available
- Compare differences in logic, configuration, I/O configuration, registers, documentation, and other program components between two versions of a program file
- Store backup files that are readily available should a problem occur with a PLC or PLC program
- Save multiple versions of the same file, any of which can be rolled back should a change cause unexpected results
- Test and debug PLC programs with Simulator before going live, without requiring expensive hardware, by simulating a CTI 2500 Series<sup>®</sup> PLC





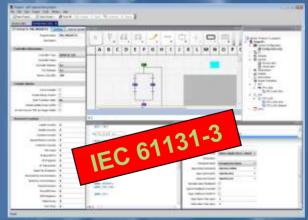
For advanced security and version control, the PLC WorkShop SuperSuite<sup>TM</sup> is available.

- Share PLC program files among multiple users
- Schedule automated backups of programs from within PLCs
- Store PLC program files under version control in multiple repositories with custom access permissions
- Access PLC program files under version control from a centralized server
- Set user rights and security for version control
  - Secure access to sensitive files

### **New State-of-the-Art Programming Environment**

Alternate PLC programming environment based on several integrated languages :

- Function Blocks,
- Structured Text,
- Sequential Function Charts
- Ready-to-use library for motors, valves, PID controllers, analog alarms and other common devices.



- Compile for all CTI 2500 Series<sup>®</sup> CPU: C100, C200, C300 and C400
- Download of changes in Run mode
- Cross Reference: identify where items are used within the PLC program
- Module Editor: configure CTI I/O
- Profibus Editor: configure Probifus I/O
- Debug mode

