Vision570™/560™ Color OPLC™

... Our Color PLCs bring your system to life ...

Color Vision570™ / Vision560™ Series Featuring:

PLC

- I/O options include high-speed, temperature & weight measurement
- Auto-tune PID, up to 24 independent loops
- Recipe programs and datalogging via Data Tables
- SD card - log, backup, clone, & more
- Time-based control in 3 clicks

Communication

- Ethernet via TCP/IP
- Web server: Use built-in HTML pages, or design complex pages to view and edit PLC data via the Internet
- Send e-mail function
- SMS messaging
- GPRS/GSM/CDMA enabled

HMI

- Up to 1024 user-designed screens
- 500 images per application
- HMI graphs - color-code Trends
- Built-in alarm screens
- Text String Library—easy localization
- Virtual alpha-numeric keypad
- Troubleshoot via the HMI panel—no PC needed

- Remote Access utilities
- MODBUS protocol support
  CANbus: CANopen, UniCAN, SAE J1939 & more
- DF1 Slave
- Ports: supplied with 2 isolated RS232/RS485 and 1 CANbus; 1 port may be added for serial/Ethernet

An advanced PLC with an integrated color Touchscreen, plus Snap-in and Expansion I/Os (up to 1000)

CE / UL

New!*

Article Number	V570-57-T20B*	V570-57-T40B	V560-T25B*
I/O Options			
Snap-in I/O Modules	Plug these modules directly into the back of the Vision unit to create a self-contained PLC with up to 62 I/Os. Inputs may include Digital, Analog and Temperature Measurement. Outputs may include Transistor, Relay or Analog (sold separately).		
I/O Expansion	Local or Remote I/Os may be added via expansion port or via CANbus		
Program			
Application Memory	Application Logic: 2MB • Images: 12MB • Fonts: 1MB		
Scan Time	9μsec per 1K of typical application		
Memory Operands	8192 coils, 4096 registers, 512 long integers (32 bit), 256 double words (32 bit unsigned), 64 floats, 384 timers (32 bit), 32 counters Additional non-retainable operands: 1024 X-bits, 512 X-integers, 256 X-long integers, 64 X-double words		
Data Tables	120K dynamic RAM data (recipe parameters, datalogs, etc.), up to 256K Flash data		
SD Card	Store datalogs, Alarm History, Data Tables, Trend data, export to Excel • Back up Ladder, HMI & OS, clone PLCs		
Enhanced Features	Trends: graph any value and display on HMI • Built-in Alarm management system • String Library: instantly switch HMI language		
Operator Panel			
Type	TFT LCD		
Display Backlight Illumination	white LED	Fluorescent lamp	white LED
Colors	65,536 colors, 16-bit resolution • Brightness- Adjustable via touchscreen or software		
Display Resolution & Size	320 x 240 pixels (QVGA), 5.7"		
Touchscreen	Resistive, Analog		
Keyboard			
Number of keys	Virtual keyboard		24 programmable keys. Labeling options - function keys or customized
General			
Power Supply	12/24VDC	24VDC	12/24VDC
Battery	7 years typical at 25°C, battery back-up for all memory sections and RTC		
Environment	IP65/NEMA4X (when panel mounted)		
Clock	Real-time clock functions (date and time)		

* Not yet UL certified

I/O Expansion Modules

Expand your system with local or remote I/O expansion modules[1]. Vision series support both local & remote I/O modules. M90/M91[2] support local modules only.

Digital Modules

IO-DI8-TO8	IO-DI8-RO4	IO-DI8-RO8	EX90-DI8-RO8[3]	IO-DI16
24VDC 8 Digital Inputs, pnp/npn, including one High-speed Counter 8 pnp Transistor Outputs	24VDC 8 Digital Inputs, pnp/npn, including one High-speed Counter 4 Relay Outputs	24VDC 8 Digital Inputs, pnp/npn, including one High-speed Counter 8 Relay Outputs	24VDC 8 Digital Inputs, pnp, including one High-speed Counter 8 Relay Outputs	24VDC 16 Digital Inputs, pnp/npn, including one High-speed Counter

IO-TO16	IO-RO8	IO-RO16	IO-DI8ACH
24VDC 16 pnp Transistor Outputs	24VDC (power supply) 8 Relay Outputs	24VDC (power supply) 16 Relay Outputs	110/220 VAC 8 AC Inputs

CE/UL

Analog, Temperature and Weight/Strain Measurements

IO-AI4-AO2	IO-PT400	IO-PT4K
24VDC (power supply) 4 Analog Inputs 12-bit, 0-10V, 0-20mA, 4-20mA, 2 Analog Outputs, 12-bit + sign, ±10V, 0-20mA, 4-20mA	4 PT100/NI100/NI120 Inputs Range PT100: -50°C ÷ 460°C (-58°F ÷ 860°F) Range NI100: -50°C ÷ 232°C (-58°F ÷ 449°F) Range NI120: -50°C ÷ 172°C (-58°F ÷ 341°F) 12-bit	4 PT1000/NI1000 Inputs Range PT1000: -50°C ÷ 460°C (-58°F ÷ 860°F) Range NI1000: -50°C ÷ 232°C (-58°F ÷ 449°F) 12-bit

IO-AO6X	IO-LC1[4] IO-LC3[4]	IO-ATC8	IO-AI8[6]
24VDC (power supply) 6 Isolated Analog Outputs 0-10V, 0-20mA, 4-20mA 12-bit	12/24VDC (Power Supply) 1-3 Loadcell / Strain gauge Inputs Input voltage ranges: ± 20mV, ±80mV Excitation: AC/DC 1 Digital pnp Input 2 pnp Outputs Not supported by all OPLCs™	8 Thermocouple/ Analog Inputs T/C J, K, T, B, E, N, R, S, 0.1° Resolution, 0-10V, 0-20mA, 4-20mA, 12/14-bit	8 Analog Inputs 0 ÷ 10V / 0 ÷ 20mA 14-bit

I/O Expansion Module Adapters

EX-A2X[1]
Local I/O module adapter. Galvanic isolation. Up to 8 modules may be connected to a single PLC[1]. Supports both 12/24 VDC

EX-RC1[5]
Remote I/O module adapter, via CANbus. Multiple adapters may be connected to a single PLC, with up to 8 modules to each adapter[1]. Supports both 12/24 VDC.

[1] Number of I/Os may vary according to module
[2] Except for M90-19-B1A
[3] The EX90 is housed in an open casing. Only one EX90 can be connected per PLC, as a single expansion module; Expansion adapter not required.
[4] IO-LCx models are supported by the M91 & Vision series. Not supported by the M90 series.
[5] EX-RC1 is supported by Vision series. Not supported by M91 series.
[6] Not yet UL certified

* Additional 12VDC models are listed on Unitronics web site.

XL Digital/Analog Modules[6]

IO-D16A3-RO16	IO-D16A3-TO16	EX-D16A3-RO8	EX-D16A3-TO16
24VDC, 16 Digital Inputs pnp/npn, including two High-speed Counters, 3 Analog Inputs, 10-bit, 0-20mA, 4-20mA, 16 Relay Outputs	24VDC, 16 Digital Inputs pnp/npn, including one High-speed Counter, 3 Analog Inputs, 10-bit, 0-20mA, 4-20mA, 15 pnp + 1 pnp/npn Transistor Outputs including 1 HSO	24VDC, built-in Expansion Module Adapter, 16 Digital Inputs, pnp/npn, including two High-speed Counters, 3 Analog Inputs 10-bit, 0-20mA, 4-20mA, 8 Relay Outputs	24VDC, built-in Expansion Module Adapter, 16 Digital Inputs, pnp/npn, including one High-speed Counter, 3 Analog Inputs 10-bit, 0-20mA, 4-20mA, 15 pnp + 1 pnp/npn Transistor Outputs including 1 HSO

Snap-in I/O Modules

Plug a Snap-in module directly into the back of a Vision PLC. Compatible with all V200, V500 and V1040 (V2XX, V5XX, V1040) Vision models.

New!

Article No.	V200-18-E1B	V200-18-E2B	V200-18-E3XB	V200-18-E4XB	V200-18-E5B	V200-18-E6B[1]	V200-18-E62B[1]
Digital Inputs (isolated)	16 npn/pnp (including 2 Shaft-encoder inputs)	16 npn/pnp (including 2 Shaft-encoder inputs)	18 npn/pnp (including 2 Shaft-encoder inputs)	18 npn/pnp (including 2 Shaft-encoder inputs)	18 npn/pnp (including 2 Shaft-encoder inputs)	18 npn/pnp (including 2 Shaft-encoder inputs)	30 npn/pnp (including 2 Shaft-encoder inputs)
Analog Inputs	3 10-bit 0-10V, 0-20mA 4-20mA	2 10-bit 0-10V, 0-20mA 4-20mA	4 isolated 12-14-bit (software dependent) 0-10V, 0-20mA 4-20mA and/or 4 TC/PT100	4 isolated 12-14-bit (software dependent) 0-10V, 0-20mA 4-20mA and/or 4 TC/PT100	3 10-bit 0-10V, 0-20mA 4-20mA	3 10-bit 0-10V, 0-20mA 4-20mA & 2 14-bit 0-10V, 0-20mA 4-20mA and/or 2 TC/PT100	2 10-bit 0-10V, 0-20mA 4-20mA
Temperature Measurement	None	None			None		None
Digital Outputs (isolated)	4 npn/pnp (including 2 High-speed outputs)	4 npn/pnp (including 2 High-speed outputs)	2 npn/pnp High-speed	17 npn/pnp (including 2 High-speed)	15 pnp, 2 npn/pnp (including 2 High-speed)	2 npn/pnp High-speed	28 pnp 2 npn/pnp High-speed
Relay Outputs (isolated)	10	10	15	None	None	15	None
Analog Outputs	None	2 12-bit 0-10V, 0-20mA 4-20mA	4 12-bit 0-10V, 4-20mA isolated	4 12-bit 0-10V, 4-20mA isolated	None	2 12-bit 0-10V, 4-20mA isolated	None

[1] V200-18-E6B, V200-18-E62B is not yet UL certified

Additional COM Module

Use these modules to enhance Vision's communication capabilities[1]

Ethernet	RS232/RS485	Isolated RS232/RS485	CANbus
V100-17-ET2 (for V130 and V350 series) V200-19-ET1 (for V200, V500 and V1040 series)	V100-17-RS4 (for V130 and V350 series) V200-19-RS4 (for V200, V500 and V1040 series)	V100-17-RS4X (for V130 and V350 series) V200-19-RS4-X (for V200, V500 and V1040 series)	V100-17-CAN (for V130 and V350 series)

[1] V200/V500/V1040: 1 optional port for serial or Ethernet,
V130/V350: 1 optional port for serial or Ethernet & 1 optional port for CANbus

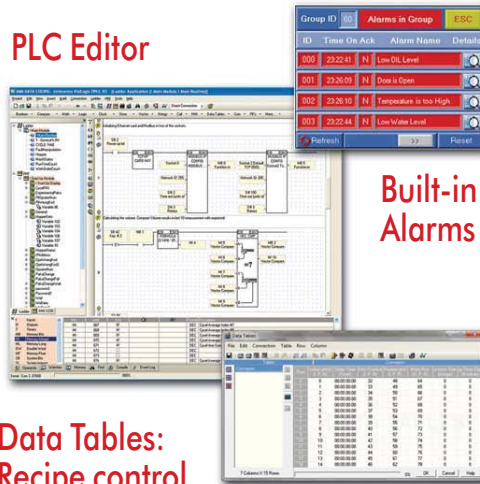# A single, integrated programming environment - Free of charge!

Software Utilities: Added Value - Free of charge!

Easy Hardware Configuration

PLC Editor

Built-in Alarms

- Select base PLC
- Configure I/Os

Data Tables: Recipe control

- Click & drop Ladder elements
- Modular program function: create & call subroutines
- Built-in function blocks save code & simplify tasks

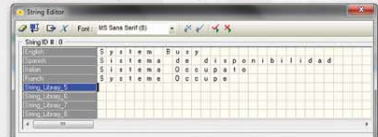## Intuitive HMI Design

String Library: instantly switch HMI language

Image Library

- Assign functions to HMI keys
- Create & conditionally display operator messages
- Assign "Touch" properties to any screen element
- Use color images & graph to reflect variable values & trends

* Note that graphics are supported by the Vision series;
   (Touch Library, & Alarms are supported by the Enhanced features, String Vision series.)

* Note that software features are PLC model-dependent

Remote Access & Operator:
PC to PLC access/control via modem or network, view multiple operator panels
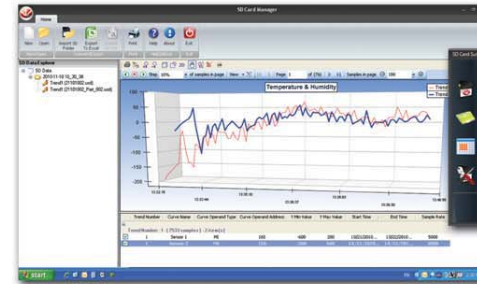
SD Card Suite:
Manage data— Trends, Alarms, Data Table; remotely read/write data to SD Card

DataXport:
Log run-time/stored Data Table data, export to Excel
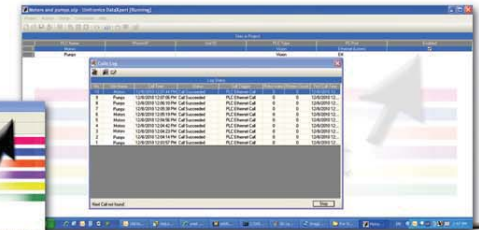
- UniOPC/UniDDE Server: Communicate with SCADA/Windows applications
- UniDownload Manager: Download multiple, compressed PLC applications simultaneously
- UniVision Licensing: Protect your Intellectual Property
- ActiveX & .NET communication driver - Easily implement communication between PLC and PC applications

Free Technical Support

When you call Unitronics Technical Support, you speak to an actual Support Team expert

When you email **support@unitronics.com**, you correspond with Support Team experts

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