

# Vision350™ Color OPLC™

... The world's smallest PLC with an integrated Color Touchscreen ...

CE/UL

## Color Vision350™ Series Featuring:

- ### HMI
- 1024 user-designed screens and 250 images per application
  - HMI graphs—color-code Trends
  - Built-in alarm screens
  - Text String Library—easy localization
  - Troubleshoot via the HMI panel—no PC needed

### 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
- Micro SD card—log, backup, done, & more
- Time-based control in 3 clicks

### Communication

- GPRS/GSM/CDMA enabled
- Ethernet via TCP/IP
- Web server: Use built-in HTML pages, or design complex pages to view and edit PLC data via the Internet
- SMS messaging, Send e-mail function
- Remote Access utilities
- MODBUS protocol support
- CANbus: CANopen, UniCAN, SAE J1939 & more
- DF1 Slave
- Ports: supplied with 1 RS232/RS485, 2 ports may be added: 1 Serial/Ethernet/Profibus and 1 CANbus

## Color it beautiful! Power PLC, Color Touchscreen & onboard, expandable I/Os (up to 512)

Article Number	V350-35-B1	V350-35-T20*	V350-35-R34	V350-35-T84*	V350-35-T86*	V350-35-R422	V350-35-T2	V350-35-R38	V350-35-T424
Onboard I/Os	10 Digital 2 D/A Inputs 6 Relay Outputs 2 High-speed Transistor Outputs	20 Digital 2 D/A Inputs 12 Relay Outputs	20 Digital 2 D/A Inputs 8 Relay Outputs 4 High-speed Transistor Outputs	8 Digital 2 D/A, 4 Analog Inputs 6 Relay Outputs 2 High-speed Transistor Outputs	8 Digital 2 D/A, 4 Analog Inputs 4 Relay Outputs 4 High-speed Transistor Outputs	10 Digital 2 D/A Inputs 12 Transistor Outputs	20 Digital 2 D/A Inputs 16 Transistor Outputs	8 Digital 2 D/A Inputs TC/Digital Inputs 10 Transistor Outputs 2 Analog Outputs	
Inputs									
Digital	3 200kHz* 32-bit	3 200kHz* 32-bit	3 200kHz* 32-bit	1 200kHz* 32-bit	1 200kHz* 32-bit	3 30kHz 32-bit	2 30kHz 32-bit	2 30kHz 32-bit	1 30kHz 32-bit
Analog	2 10-bit, 0-10V 0-20mA 4-20mA	2 10-bit, 0-10V 0-20mA 4-20mA	2 10-bit, 0-10V 0-20mA 4-20mA	6 10-bit 0-10V 0-20mA, 4-20mA 4-20mA	2 14-bit 0-10V, 0-20mA 4-20mA	2 (2 modes) Normal: 14-bit Pres: 12-bit 0-10V, 0-20mA 4-20mA	2 10-bit 0-10V 0-20mA 4-20mA	2 14-bit 0-10V, 0-20mA 4-20mA	2 14-bit 0-10V, 0-20mA 4-20mA
Temperature Measurement	None	None	None	None	and os 2 PTT00/TC	None	None	None	and os 2 PTT00/TC
Outputs									
Digital	6 relay	12 relay	8 relay	6 relay	8 relay	4 relay	12 relay	16 relay	10 relay
High-speed Outputs (TMM)	2 opt (2 PTO) 200kHz max	None	4 opt (3 PTO) 200kHz max	2 opt (2 PTO) 200kHz max	None	200kHz max	7 0.5kHz	7 0.5kHz	5 0.5kHz
Analog	None	None	None	None	2 12-bit 0-10V, 4-20mA	2 12-bit 0-10V, 4-20mA	None	None	2 12-bit 0-10V, 4-20mA
I/O Expansion	Local or Remote I/Os may be added via expansion port or via CANbus								
Program	Application Logic: IMB - Images: 6MB - Fonts: 512K 15k, except 1K of physical application								
Scan Time	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-retentable operands: 1024 X-bits, 512 X-integers, 256 X-long integers, 64 X-double words								
Memory Operands	120K dynamic RAM data (recipe parameters, datalog, etc.), up to 256K Flash data								
Data Tables	Store datalog, Alarm History, Data Tables, Trend data, export to Excel - Back up Ladder, HMI & OS, done PLC								
SD card (Micro)	Trends: graph any value and display on HMI • String Library: instantly switch HMI language								
Operator Panel	TFT LCD • 65,536 colors, 16-bit resolution • Brightness: Adjustable via touchscreen or software Resolution: 320 x 240 pixels (QVGA) • Size: 3.5"								
Type & Colors	Resistive, Analog								
Touchscreen	5 programmable keys, Labeling options: function keys, arrows, or customized								
Keys	24VDC except for V350-35-B1, which is 12V/4VDC								
General	7 years typical at 77°F, battery back-up for all memory sections and RTC								
Power Supply	NEMA4/IP65 (when panel mounted)								
Battery	Real-time clock functions (date and time)								
Environment									
Clock									



<sup>1</sup> In these models certain inputs are adaptable, and can function as either digital, analog, and in certain models also as thermocouple or PTO0. Using adaptable inputs reduces the amount of free digital inputs. For example, V350-35-R422 offers 12 digital inputs. Implementing 2 TC inputs requires 4 digital inputs, leaving 8 free.

<sup>2</sup> Certain inputs can function as high-speed counters, shaft-encoder inputs, or normal digital inputs

<sup>3</sup> This specification depends on cable length.

<sup>4</sup> This specification depends upon driver type.

\* V350-35-T20 & V350-35-T86 are not yet UL certified.