

# Vision350™ Color OPLC™

## 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, clone, & more
- Time-based control in 3 clicks

### Communication

- GPRS/GSM/CDMA enabled
- TCP/IP via Ethernet
- 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

Flat Panel



V350-J

Classic Panel



V350

<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 PT100. Using adaptable inputs reduces the amount of free digital inputs. For example, V350-35-RA22 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.

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



## Color it beautiful!

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

New

Article Number										
Classic Panel	V350-35-B1	V350-35-TR20	V350-35-R34	V350-35-TR34	V350-35-TR6	V350-35-RA22	V350-35-TRA22	V350-35-T2	V350-35-T38	V350-35-TA24
Flat Panel	V350-J-B1	V350-J-TR20	V350-J-R34	V350-J-TR34	V350-J-TR6	V350-J-RA22	V350-J-TRA22	V350-J-T2	V350-J-T38	V350-J-TA24
	No onboard I/Os	10 Digital 2 D/A Inputs <sup>1</sup> 6 Relay Outputs 2 High-speed Transistor Outputs	20 Digital 2 D/A Inputs <sup>1</sup> 12 Relay Outputs	20 Digital 2 D/A Inputs <sup>1</sup> 8 Relay 4 High-speed Transistor Outputs	6 Digital 2 D/A, 4 Analog Inputs <sup>1</sup> 6 Relay 2 High-speed Transistor Outputs	8 Digital 2 D/A, 2 PT100/TC/ Digital <sup>1</sup> Inputs 4 Relay, 2 Analog 4 High-speed Transistor Outputs	8 Digital, 2 D/A 2 PT100/TC/ Digital <sup>1</sup> Inputs 4 Relay, 2 Analog 4 High-speed Transistor Outputs	10 Digital 2 D/A Inputs <sup>1</sup> 12 Transistor Outputs	20 Digital 2 D/A Inputs <sup>1</sup> 16 Transistor Outputs	8 Digital 2 D/A, 2 PT100/TC/Digital <sup>1</sup> Inputs 10 Transistor 2 Analog Outputs
<b>Inputs</b>										
Digital	None	12	22	22	8	12	12	12	22	12
HSC/Shaft-Encoder/ Max Freq. Measurer <sup>2&amp;3</sup>		3 200kHz <sup>4</sup> 32-bit	3 30kHz 32-bit	3 200kHz <sup>4</sup> 32-bit	1 200kHz <sup>4</sup> 32-bit	1 30kHz 32-bit	1 200kHz <sup>4</sup> 32-bit	3 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	2 10-bit, 0-10V 0-20mA, 4-20mA <b>and</b> 4 10-bit, 0-20mA 4-20mA	2 14-bit 0-10V, 0-20mA 4-20mA  <b>and as</b> 2 PT100/TC	2 (2 modes) Normal: 14-bit Fast: 12-bit 0-10V, 0-20mA 4-20mA <b>and as</b> 2 PT100/TC	2 10-bit 0-10V 0-20mA 4-20mA	2 10-bit 0-10V, 0-20mA 4-20mA	2 (2 modes) Normal: 14-bit Fast: 12-bit 0-10V, 0-20mA, 4-20mA <b>and as</b> 2 PT100/TC
Temperature Measurement		None	None	None	None	None	None	None	None	None
<b>Outputs</b>										
Digital		6 relay	12 relay	8 relay	6 relay	8 relay	4 relay	12 pnp	16 pnp	10 pnp
High-speed Outputs/PWM		2 npn (2 PTO) 200kHz max	None	4 npn (3 PTO) 200kHz max	2 npn (2 PTO) 200kHz max	None	4 npn (2 PTO) 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
<b>I/O Expansion</b>										
Local or Remote I/Os may be added via expansion port or via CANbus										
<b>Program</b>										
Application Memory	Application Logic: 1MB • Images: 6MB • Fonts: 512K									
Scan Time	15µs sec 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 (Micro)	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 • String Library: instantly switch HMI language									
<b>Operator Panel</b>										
Type & Colors	TFT LCD • 65,536 colors, 16-bit resolution • Brightness- Adjustable via touchscreen or software									
Display	Resolution: 320 x 240 pixels (QVGA) • Size: 3.5"									
Touchscreen	Resistive, Analog									
Keys	5 programmable keys. Labeling options- function keys, arrows, or customized									
<b>General</b>										
Power Supply	24VDC, except for V350-35-B1, which is 12/24VDC									
Battery	7 years typical at 25°C, battery back-up for all memory sections and RTC									
Environment	IP66/IP65/NEMA4X (when panel mounted)									
Clock	Real-time clock functions (date and time)									