

# VISION430™

Advanced PLC integrated with a 4.3" wide aspect color touchscreen. Includes an onboard I/O configuration; expand up to 512 I/Os

## Features:

### HMI

- 1024 user-designed screens and 250 images per application
- HMI graphs - color-code Trends
- Built-in alarm screens
- Text String Library - easy localization
- Memory and communication monitoring via HMI - 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
- Date & Time-based control

### Communication

- TCP/IP via Ethernet
- 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
- Remote Access utilities
- MODBUS protocol support
- CANbus: CANopen, UniCAN, SAE J1939 and more
- DF1 Slave
- SNMP Agent V1
- FB Protocol Utility: enables serial or TCP/IP communications with 3<sup>rd</sup>-party device; barcode readers, frequency converters, etc
- Ports: supplied with mini-USB programming port ; 2 ports may be added: 1 Serial/Ethernet/Profibus and 1 CANbus



V430

“ The huge advantage of this PLC was that - with everything built-in - the communications and use of tags in the HMI was so simple and intuitive. ”

CE/UL

Ashley Parr,  
HPS

<b>V430</b>										
Article Number	V430-J-B1	V430-J-RH2	V430-J-R34	V430-J-TR34	V430-J-RH6	V430-J-RA22	V430-J-TRA22	V430-J-T2	V430-J-T38	V430-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 Outputs 2 High-speed Transistor Outputs	8 Digital 2 D/A, 2 PT100/TC/ Digital <sup>1</sup> Inputs 8 Relay 2 Analog 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 pnp/npn		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	None	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 and 4 10-bit, 0-20mA 4-20mA	2 14-bit 0-10V, 0-20mA 4-20mA	2 (2 modes) Normal: 14-bit Fast: 12-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 (2 modes) Normal: 14-bit Fast: 12-bit 0-10V, 0-20mA, 4-20mA and 2 PT100/TC
Temperature Measurement		None	None	None	None	and 2 PT100/TC	and 2 PT100/TC	None	None	and 2 PT100/TC
<b>Outputs</b>										
Digital	None	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 Logic: 512K • Images: 12MB • Fonts: 1MB									
Application Memory	15µ sec per 1K of typical 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-retainable operands: 1024 X-bits, 512 X-integers, 256 X-long integers, 64 X-double words									
Memory Operands	120K dynamic RAM data (recipe parameters, datalogs, etc.), up to 256K fixed data									
Data Tables	Store datalogs, Alarm History, Data Tables, Trend data, export to Excel • Back up Ladder, HMI & OS, clone PLCs									
SD Card (Micro)	Trends: graph any value and display on HMI • String Library: instantly switch HMI language									
Enhanced Features	<b>Operator Panel</b>									
Type & Colors	TFT LCD • 65,536 colors, 16-bit resolution • Brightness - Adjustable via touchscreen or software									
Display	Resolution: 480x272 pixels • Size: 4.3"									
Touchscreen	Resistive, Analog									
Keys	5 programmable keys. Labeling options - function keys, arrows, or customized									
<b>General</b>	24VDC, except for V430-J-B1, which is 12/24VDC									
Power Supply	7 years typical at 25°C, battery back-up for all memory sections and RTC									
Battery	Real-time clock functions (date and time)									
Clock	IP66/IP65/NEMA4X (when panel mounted)									
Environment	CE, UL									
Standard	Many of our products are also UL Class 1 Div 2 and GOST certified - please contact Unitronics									

<sup>1</sup> Adapt specific inputs to function as digital or analog, and in certain models as TC or PT100. This reduces the number of free digital inputs. For example, V350-35-RA22 offers 12 digital inputs. Implementing 2 TC inputs requires 4, 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.