

VISION 130™

Palm-size, powerful PLC with built-in, black & white LCD 3.5" graphic display, keypad, & onboard I/O configuration, expand up to 256 I/Os

Features:

HMI

- 1024 user-designed screens
- 400 images per application
- HMI graphs & 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, J1939 and more
- DF1 Slave
- SNMP Agent V1
- FB Protocol Utility: enables serial or TCP/IP communications with 3rd-party device; barcode readers, frequency converters, etc
- Ports: supplied with 1 RS232/RS485; 2 ports may be added: 1 Serial/Ethernet/Profibus and 1 CANbus



V130-J
Flat Panel



V130
Classic Panel

“ The perfect solution for our need, the Vision130™ is easy to program, user-friendly and backed up with responsive tech support. ”

Michael Lamore,
President of Barrier1

		V130									
Article Number	Classic Panel	V130-33-B1	V130-33-TR20	V130-33-R34	V130-33-TR34	V130-33-TR6	V130-33-RA22	V130-33-TRA22	V130-33-T2	V130-33-T38	V130-33-TA24
	Flat Panel	V130-J-B1	V130-J-TR20	V130-J-R34	V130-J-TR34	V130-J-TR6	V130-J-RA22	V130-J-TRA22	V130-J-T2	V130-J-T38	V130-J-TA24
		No onboard I/Os	10 Digital 2 D/A Inputs ¹ 6 Relay Outputs 2 High-speed Transistor Outputs	20 Digital 2 D/A Inputs ¹ 12 Relay Outputs	20 Digital 2 D/A Inputs ¹ 8 Relay 4 High speed Transistor Outputs	6 Digital, 2 D/A 4 Analog Inputs ¹ 6 Relay Outputs 2 High-speed Transistor Outputs	8 Digital 2 D/A, 2 PT100/TC/ Digital ¹ Inputs 8 Relay 2 Analog Outputs	8 Digital, 2 D/A 2 PT100/TC/ Digital ¹ Inputs 4 Relay, 2 Analog 4 High-speed Transistor Outputs	10 Digital 2 D/A Inputs ¹ 12 Transistor Outputs	20 Digital 2 D/A Inputs ¹ 16 Transistor Outputs	8 Digital 2 D/A, 2 PT100/TC/Digital ¹ Inputs 10 Transistor 2 Analog Outputs
Inputs											
Digital pnp/npn			12	22	22	8	12	12	12	22	12
HSC/Shaft-Encoder/ Max. Freq. Measurer ^{2&3}			3 200kHz ⁴ 32-bit	3 30kHz 32-bit	3 200kHz ⁴ 32-bit	1 200kHz ⁴ 32-bit	1 30kHz 32-bit	1 200kHz ⁴ 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	
Outputs											
Digital			6 relay	12 relay	8 relay	6 relay	8 relay	4 relay	12 pnp	16 pnp	10 pnp
High-Speed Outputs/PWM		None	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
I/O Expansion		Local or Remote I/Os may be added via expansion port or via CANbus									
Program		Application Logic: 512K • Images: 256K • Fonts: 128K									
Application Memory		Application Logic: 512K • Images: 256K • Fonts: 128K									
Scan Time		20µ sec per 1K of typical application									
Memory Operands		4096 coils, 2048 registers, 256 long integers (32-bit), 64 double words (32-bit unsigned), 24 floats, 192 timers (32-bit), 24 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 fixed 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 • Built-in Alarm management system • String Library: instantly switch HMI language									
Operator Panel		Graphic STN LCD, white LED backlight									
Type		Graphic STN LCD, white LED backlight									
Display		Resolution: 128 x 64 pixels • Size: 2.4"									
Keys		20, including 10 user labeled keys (slide kit sold separately)									
General		24VDC, except for V130-33-B1, which is 12/24VDC									
Power Supply		24VDC, except for V130-33-B1, which is 12/24VDC									
Battery		7 years typical at 25°C, battery back-up for all memory sections and RTC									
Clock		Real-time clock functions (date and time)									
Environment		IP66/IP65/NEMA4X (when panel mounted)									
Standard		CE, UL Many of our products are also UL Class 1 Div 2 and GOST certified - please contact Unitronics									

¹ 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, V130-33-RA22 offers 12 digital inputs. Implementing 2 TC inputs requires 4 digital inputs, leaving 8 free.

² Certain inputs can function as high-speed counters, shaft-encoder inputs, or normal digital inputs.

³ This specification depends on cable length.

⁴ This specification depends upon driver type.