VISION 1210™/1040™

Advanced PLC from the back—big, high-resolution color touch screen from the front. Snap in I/Os for an All-in-One solutions, expand up to 1000 I/Os.

Features:

HMI
- Size: 12.1" and 10.4"
- High quality touchscreen
- Multi-language display
- Built-in Alarm Screens

PLC
- I/O options including digital, analog, high speed, temperature, and weight measurement
- Expand up to 1000 I/Os
- Auto-tune PID, up to 24 independent loops
- Recipe programs and data logging via data tables
- MicroSD card - log, backup, clone & more
- Function Blocks

Communication

Built-in ports:
- 1 Mini USB for programming
- 1 CANbus
- 2 Isolated RS485/RS232
- 1 port may be added for an additional Serial/Ethernet

Protocols:
- MODBUS TCP
- SNMP*
- CANopen, CANlayer2, UniCAN
- BACnet, KNX and M-Bus via gateway
- FB Protocol: for any 3rd party protocol

General Features:
- Web server
- E-mail & SMS
- Remote access utilities
- 3G Modem support

* SNMP V1 Trap, SNMP community Name

V1210

V1040

Snap-in I/O

Plug a Snap-in module directly into the back of a Vision PLC.

	Vision 1040	Vision 1210
Article Number	V1040-T20B	V1210-T20BJ
I/O Options		
Total supported I/Os	1000	
I/O Expansion	Snap-in I/O Modules plug directly into the back of the Vision unit (See Snap-in I/O Modules- page 35). Local or Remote I/Os may be added via expansion port or via CANbus (See I/O Expansion Modules- page 34).	
Local I/O Expansion	Use Local Expansion Adapters to add up to 8 modules	
Remote I/O Expansion	Use EX-RC1 adapters to further extend the number of I/Os[1]	
Program		
Application Memory	Application Logic: 2MB • Images: 32MB • 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	
HMI Panel		
Touch screen	Resistive, Analog	
Cut Out Height x Width (mm)	230 x 274	228.5 x 297
Resolution	800 x 600 (SVGA)	
Keys	9 programmable function keys	Virtual Keyboard
Environment		
Protection	IP65 / NEMA4X (when panel mounted)	IP66, IP65 and NEMA4X (when panel mounted)
Operating Temperature	0 to 50ºC	
Standards	CE, UL. Many of our products are also UL Class 1 Div 2 and GOST - please contact Unitronics	
General		
Battery	7 years typical at 25°C, battery back-up for all memory sections and RTC	
Clock	Real-time clock functions (date and time)	
Power Supply	12/24VDC[2]	

[1] EX-RC1: via CANbus, integrate standard Unitronics' I/O modules at distances of up to 1000m.
[2] 12V applies to PLC power supply only, and not to the I/O.

" I've not yet encountered a job that a Unitronics PLC was unable to cover. "

Timothy Moulder,
Engineer at Black & Decker

CE/UL

VISION 700™

Features:

HMI

- Size: 7"
- High quality touchscreen
- Multi-language display
- Built-in Alarm Screens

PLC

- I/O options including digital, analog, high speed, temperature, and weight measurement
- Expand up to 1000 I/Os
- Auto-tune PID, up to 24 independent loops
- Recipe programs and data logging via data tables
- MicroSD card - log, backup, clone & more
- Function Blocks

Communication

Built-in ports:
- 1 Ethernet TCP/IP
- 1 Mini USB for programming
- 1 RS485/RS232
- 2 Ports may be added: 1 Serial/Profibus and 1 CANbus

Protocols:
- MODBUS TCP
- SNMP*
- CANopen, CANlayer2, UniCAN
- BACnet, KNX and M-Bus via gateway
- FB Protocol: for any 3rd party protocol

General Features:
- Web server
- E-mail & SMS
- 3G Modem support
- Remote access utilities

* SNMP V1 Trap, SNMP community Name

Advanced PLC from the back— high-resolution color 7" touch-screen from the front. Snap in I/Os for an All-in-One solutions, expand up to 1000 I/Os.

V700

"Reliability, ease of use, connectivity and competitive prices are Unitronics' main strengths."

Mr. Andrea Della Bosca,
EV srl

I/O Options	
Total supported I/Os	1000
I/O Expansion	Snap-in I/O Modules plug directly into the back of the Vision unit (See Snap-in I/O Modules- page 35). Local or Remote I/Os may be added via expansion port or via CANbus (See I/O Expansion Modules- page 34).
Local I/O Expansion	Use Local Expansion Adapters to add up to 8 modules
Remote I/O Expansion	Use EX-RC1 adapters to further extend the number of I/Os[1]
Program	
Application Memory	Application Logic: 2MB • Images: 40MB • 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
HMI Panel	
Touch screen	Resistive, Analog
Cut Out Height x Width (mm)	125 x 193
Resolution	800 x 400 (SVGA)
Keys	Virtual Keyboard
Environment	
Protection	IP66, IP65 and NEMA4X
Operating Temperature	0 to 50º C
Standards	CE, UL Many of our products are also UL Class 1 Div 2 and GOST - please contact Unitronics
General	
Battery	7 years typical at 25°C, battery back-up for all memory sections and RTC
Clock	Real-time clock functions (date and time)
Power Supply	12/24VDC[2]

[1] EX-RC1: via CANbus, integrate standard Unitronics' I/O modules at distances of up to 1000m.
[2] 12V applies to PLC power supply only, and not to the I/O.

CE/UL

VISION 570™/560™

Advanced PLC from the back- big, high—resolution color 5.7" touchscreen from the front. Snap-in I/Os for an All-in-One solution, expands up to 1000 I/Os.

Features:

HMI
- Size: 5.7"
- High quality touchscreen
- Multi-language display
- Built-in Alarm Screens

PLC
- I/O options including digital, analog , high speed, temperature, and weight measurement
- Expand up to 1000 I/Os
- Auto-tune PID, up to 24 independent loops
- Recipe programs and data logging via data tables
- MicroSD/ SD card – log, backup, clone & more
- Function Blocks

Communication

Built-in ports:
- 1 Mini USB for programming in V570
- 1 CANbus
- 2 Isolated RS485/ RS232
- 1 port may be added for an additional Serial/Ethernet

Protocols:
- MODBUS TCP
- SNMP*
- CANopen, CANlayer2, UniCAN
- BACnet, KNX and M-Bus via gateway
- FB Protocol: for any 3rd party protocol

General Features:
- Web server
- E-mail & SMS
- 3G Modem support
- Remote access utilities

* SNMP V1 Trap, SNMP community Name

V570

V560

"For a first time user, I had a great experience. I look forward to incorporating this brand of product on future jobs."

Jeremy Charles Keene,
Controls Manager at General Broach Company

	Vision 570	Vision 560
Article Number	V570-57-T20B-J[2]	V560-T25B
I/O Options		
Total supported I/Os	1000	
I/O Expansion	Snap-in I/O Modules plug directly into the back of the Vision unit (See Snap-in I/O Modules- page 35). Local or Remote I/Os may be added via expansion port or via CANbus (See I/O Expansion Modules- page 34).	
Local I/O Expansion	Use Local Expansion Adapters to add up to 8 modules	
Remote I/O Expansion	Use EX-RC1 adapters to further extend the number of I/Os[1]	
Program		
Application Memory	Application Logic: 2MB • Images: 16MB • 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	
HMI Panel		
Touch screen	Resistive, Analog	
Cut Out Height x Width (mm)	124.5 x 182	126.0 x 209
Resolution	320 x 240 (QVGA)	
Keys	Virtual Keyboard	24 programmable keys Labeling options – function keys or customized
Environment		
Protection	NEMA4X, IP66, IP65 (when panel mounted)	NEMA4X, IP65 (when panel mounted)
Operating Temperature	0 to 50ºC	
Standards	CE, UL Many of our products are also UL Class 1 Div 2 and GOST - please contact Unitronics	
General		
Battery	7 years typical at 25°C, battery back-up for all memory sections and RTC	
Clock	Real-time clock functions (date and time)	
Power Supply	12/24VDC[3]	

[1] EX-RC1: via CANbus, integrate standard Unitronics' I/O modules at distances of up to 1000m.
[2] To order a classic V570 with a Bezel panel, order V570-57-T20B.
[3] 12V applies to PLC power supply only, and not to the I/O.

VISION 430™

Advanced PLC integrated with a 4.3" wide-aspect color touch screen. Includes built-in I/O configuration, expand up to 512 I/Os.
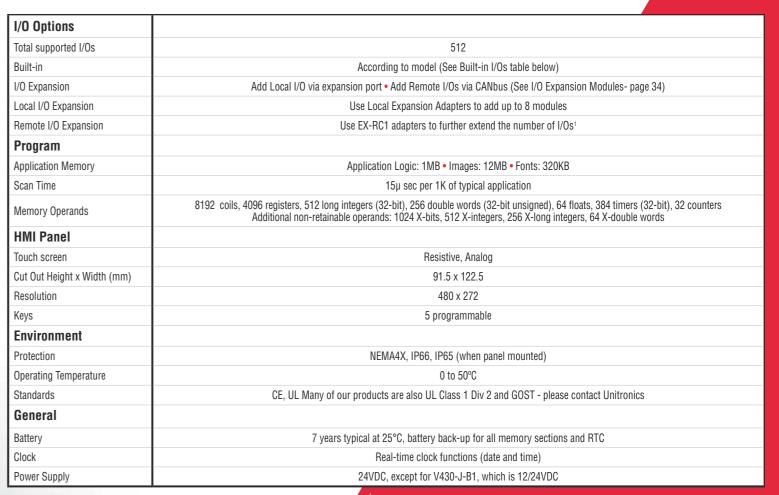
Features:

HMI

- Size: 4.3"
- High quality touchscreen
- Multi-language display
- Built-in Alarm Screens

PLC

- I/O options including digital, analog, high speed, temperature, and weight measurement
- Expand up to 512 I/Os
- Auto-tune PID, up to 24 independent loops
- Recipe programs and data logging via data tables
- Micro SD card - log, backup, clone & more
- Function Blocks

Communication

Built-in ports:

- 1 Mini USB for programming
- 1 RS485/RS232
- 2 ports may be added: 1 Serial/Ethernet/Profibus and 1 CANbus

Protocols:

- MODBUS TCP
- SNMP*
- CANopen, CANlayer2, UniCAN
- BACnet, KNX and M-Bus via gateway
- FB Protocol: for any 3rd party protocol

General Features:

- Web server
- E-mail & SMS
- 3G Modem support
- Remote access utilities

* SNMP V1 Trap, SNMP community Name

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. "
>
> Ashley Parr,
> HPS

I/O Options	
Total supported I/Os	512
Built-in	According to model (See Built-in I/Os table below)
I/O Expansion	Add Local I/O via expansion port • Add Remote I/Os via CANbus (See I/O Expansion Modules- page 34)
Local I/O Expansion	Use Local Expansion Adapters to add up to 8 modules
Remote I/O Expansion	Use EX-RC1 adapters to further extend the number of I/Os[1]
Program	
Application Memory	Application Logic: 1MB • Images: 12MB • Fonts: 320KB
Scan Time	15µ 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
HMI Panel	
Touch screen	Resistive, Analog
Cut Out Height x Width (mm)	91.5 x 122.5
Resolution	480 x 272
Keys	5 programmable
Environment	
Protection	NEMA4X, IP66, IP65 (when panel mounted)
Operating Temperature	0 to 50°C
Standards	CE, UL Many of our products are also UL Class 1 Div 2 and GOST - please contact Unitronics
General	
Battery	7 years typical at 25°C, battery back-up for all memory sections and RTC
Clock	Real-time clock functions (date and time)
Power Supply	24VDC, except for V430-J-B1, which is 12/24VDC

Vision430™ models - Built-in I/Os

[1] EX-RC1: via CANbus, integrate standard Unitronics' I/O modules at distances of up to 1000m.

Article	Summary	Inputs [1]				Outputs				Operating Voltage
		Digital[2]	HSC/Shaft-encoder[2]	Analog	Temperature Measurement	Transistor[3]	PWM/HSO[3]	Relay	Analog	
V430-J-B1	No onboard I/Os	—	—	—	—	—	—	—	—	12/24VDC
V430-J-RH2	10 Digital, 2 D/A Inputs[1]; 6 Relay Outputs	12	3 200kHz, 32-bit	2 0-10V, 0-20mA, 4-20mA 10-bit	—	—	—	6	—	24VDC
V430-J-R34	20 Digital, 2 D/A Inputs[1]; 12 Relay Outputs	22	3 30kHz, 32-bit	2 0-10V, 0-20mA, 4-20mA 10-bit	—	—	—	12	—	24VDC
V430-J-TR34	20 Digital, 2 D/A Inputs[1]; 8 Relay, 4 High-speed Transistor Outputs	22	3 200kHz, 32-bit	2 0-10V, 0-20mA, 4-20mA 10-bit	—	4 npn	4 (3 PTO) 200 kHz max	8	—	24VDC
V430-J-RH6	6 Digital, 2 D/A[1]; 4 Analog Inputs; 6 Relay Outputs	8	1 200kHz, 32-bit	2 0-10V, 0-20mA, 4-20mA and 4 0-20mA, 4-20mA 10-bit	—	—	—	6	—	24VDC
V430-J-RA22	8 Digital, 2 D/A, 2 TC/PT100/Digital Inputs[1]; 8 Relay, 2 Analog Outputs	12	1 30kHz, 32-bit	2 0-10V, 0-20mA, 4-20mA 14-bit	2 Thermocouple, PT100	—	—	8	2 0-10V, 4 -20mA 12-bit	24VDC
V430-J-TRA22	8 Digital, 2 D/A, 2 TC/PT100/Digital Inputs[1]; 4 Relay, 2 Analog, 4 High-Speed Transistor Outputs	12	1 200kHz, 32-bit	2 0-10V, 0-20mA, 4-20mA 14-bit	2 Thermocouple, PT100	4 npn	4 (2 PTO) 200 kHz max	4	2 0-10V, 4 -20mA 12-bit	24VDC
V430-J-T2	10 Digital, 2 D/A Inputs[1]; 12 Transistor Outputs	12	3 30kHz, 32-bit	2 0-10V, 0-20mA, 4-20mA 10-bit	—	12 pnp	7 0.5kHz	—	—	24VDC
V430-J-T38	20 Digital, 2 D/A Inputs [1]; 16 Transistor Outputs	22	2 30kHz, 32-bit	2 0-10V, 0-20mA, 4-20mA 10-bit	—	16 pnp	7 0.5kHz	—	—	24VDC
V430-J-TA24	8 Digital, 2 D/A, 2 TC/PT100/Digital Inputs [1]; 10 Transistor, 2 Analog Outputs	12	1 30kHz, 32-bit	2 0-10V, 0-20mA, 4-20mA 14-bit	2 Thermocouple, PT100	10 pnp	5 0.5kHz	—	2 0-10V, 4 -20mA 12-bit	24VDC

[1] In some models certain inputs are adaptable via wiring and software settings, and can function as digital, high-speed, analog, and in certain models as TC or PT100. Adapting requires input pins. This reduces the number of digital inputs. Pin requirements:

- Each high-speed requires 1 or 2 pins according to high-speed mode.
- Each analog input requires 1 pin.
- Each TC requires 2 pins per TC input
- The first PT input requires 3 pins and two additional pins for each additional PT input.

Example: V430-J-RA22 offers 12 digital inputs. Implementing 2 TC inputs requires 4 pins, leaving 8 pins free. Implementing 2 PT inputs uses 5 input pins.

[2] The total number of digital inputs listed includes high-speed and adaptable inputs.

[3] The total number of digital outputs listed includes high-speed outputs.

CE / UL

VISION 350™

Palm-sized All-in-One: advanced PLC with a 3.5" color touchscreen. Includes built-in I/O configuration, expands up to 512 I/Os.

Features:

HMI

- Size: 3.5"
- High quality touchscreen
- Multi-language display
- Built-in Alarm Screens

PLC

- I/O options including digital, analog, high speed, temperature, and weight measurement
- Expand up to 512 I/Os
- Auto-tune PID, up to 24 independent loops
- Recipe programs and data logging via data tables
- Micro SD card - log, backup, clone & more
- Function Blocks

Communication

Built-in ports:

- 1 Mini USB for programming
- 1 RS485/RS232
- 2 ports may be added: 1 Serial/Ethernet/Profibus and 1 CANbus

Protocols:

- MODBUS TCP
- SNMP*
- CANopen, UniCAN, CANlayer2
- BACnet, KNX and M-Bus via gateway
- FB Protocol: for any 3rd party protocol

General Features:

- Web server
- E-mail & SMS
- 3G Modem support
- Remote access utilities

*SNMP V1 Trap, SNMP community Name

V350

> "There were significant cost savings using the Unitronics PLC."
>
> **Justin Butler,**
> Senior Electrical Engineer at Energy Plant Solutions

(Side tabs: UniStream® Series, Vision™ Series, Samba™ Series, Jazz® Series)

I/O Options	
Total supported I/Os	512
Built-in	According to model (See Built-in I/Os table below)
I/O Expansion	Add Local I/O via expansion port • Add Remote I/Os via CANbus. (See I/O Expansion Modules- page 34)
Local I/O Expansion	Use Local Expansion Adapters to add up to 8 modules
Remote I/O Expansion	Use EX-RC1 adapters to further extend the number of I/Os[1]
Program	
Application Memory	Application Logic: 1MB • Images: 8MB • Fonts: 320KB
Scan Time	15μ 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
HMI Panel	
Touch screen	Resistive, Analog
Cut Out Height x Width (mm)	92 x 92
Resolution	320 x 240 (QVGA)
Keys	5 programmable keys. Labeling options - function keys, arrows, or customized
Environment	
Protection	NEMA4X, IP66, IP65 (when panel mounted)
Operating Temperature	0°C to 50°C, For V350-JS-TA24 & V350-S-TA24: -30°C to 60°C[4]
Standards	CE, UL Many of our products are also UL Class 1 Div 2 and GOST - please contact Unitronics
General	
Battery	7 years typical at 25°C, battery back-up for all memory sections and RTC
Clock	Real-time clock functions (date and time)
Power Supply	24VDC, except for V350-J-B1, which is 12/24VDC

Vision350™ models - Built-in I/Os

[1] EX-RC1: via CANbus, integrate standard Unitronics' I/O modules at distances of up to 1000m.

Article [5]	Summary	Inputs [1]				Outputs				Operating Voltage
		Digital [2]	HSC/Shaft-encoder [2]	Analog	Temperature Measurement	Transistor [3]	PWM/HSO [3]	Relay	Analog	
V350-J-B1	No onboard I/Os	—	—	—	—	—	—	—	—	12/24VDC
V350-J-TR20	10 Digital, 2 D/A Inputs[1] 6 Relay Outputs 2 High-speed Transistor Outputs	12	3 200kHz, 32-bit	2 0-10V, 0-20mA, 4-20mA 10-bit	—	2 npn	2 (2 PTO) 200 kHz max	6	—	24VDC
V350-J-R34	20 Digital, 2 D/A Inputs[1] 12 Relay Outputs	22	3 30kHz, 32-bit	2 0-10V, 0-20mA, 4-20mA 10-bit	—	—	—	12	—	24VDC
V350-J-TR34	20 Digital, 2 D/A Inputs[1] 8 Relay, 4 High-speed Transistor Outputs	22	3 200kHz, 32-bit	2 0-10V, 0-20mA, 4-20mA 10-bit	—	4 npn	4 (3 PTO) 200 kHz max	8	—	24VDC
V350-J-TR6	6 Digital, 2 D/A[1] 4 Analog Inputs 6 Relay Outputs 2 High-speed Transistor Outputs	8	1 200kHz, 32-bit	2 0-10V, 0-20mA, 4-20mA and 4 0-20mA, 4-20mA 10-bit	—	2 npn	2 (2 PTO) 200 kHz max	6	—	24VDC
V350-J-RA22	8 Digital, 2 D/A, 2 TC/PT100/ Digital Inputs[1] 8 Relay, 2 Analog Outputs	12	1 30kHz, 32-bit	2 0-10V, 0-20mA, 4-20mA 14-bit	2 Thermocouple, PT100	—	—	8	2 0-10V, 4 -20mA 12-bit	24VDC
V350-J-TRA22	8 Digital, 2 D/A, 2 TC/PT100/ Digital Inputs[1] 4 Relay, 2 Analog, 4 High-Speed Transistor Outputs	12	1 200kHz, 32-bit	2 0-10V, 0-20mA, 4-20mA 14-bit	2 Thermocouple, PT100	4 npn	4 (2 PTO) 200 kHz max	4	2 0-10V, 4 -20mA 12-bit	24VDC
V350-J-T2	10 Digital, 2 D/A Inputs[1] 12 Transistor Outputs	12	3 30kHz, 32-bit	2 0-10V, 0-20mA, 4-20mA 10-bit	—	12 pnp	7 0.5kHz	—	—	24VDC
V350-J-T38	20 Digital, 2 D/A Inputs[1] 16 Transistor Outputs	22	2 30kHz, 32-bit	2 0-10V, 0-20mA, 4-20mA 10-bit	—	16 pnp	7 0.5kHz	—	—	24VDC
V350-J-TA24 V350-JS-TA24	8 Digital, 2 D/A, 2 TC/PT100/ Digital Inputs[1] 10 Transistor, 2 Analog Outputs	12	1 30kHz, 32-bit	2 0-10V, 0-20mA, 4-20mA 14-bit	2 Thermocouple, PT100	10 pnp	5 0.5kHz	—	2 0-10V, 4 -20mA 12-bit	24VDC

[1] In some models certain inputs are adaptable via wiring and software settings, and can function as digital, high-speed, analog, and in certain models as TC or PT100. Adapting requires input pins. This reduces the number of digital inputs. Pin requirements:

- Each high-speed requires 1 or 2 pins according to high-speed mode.
- Each analog input requires 1 pin.
- Each TC requires 2 pins per TC input
- The first PT input requires 3 pins, and two additional pins for each additional PT input.

Example: V350-35-RA22 offers 12 digital inputs. Implementing 2 TC inputs requires 4 pins, leaving 8 pins free. Implementing 2 PT inputs uses 5 input pins.

[2] The total number of digital inputs listed includes high-speed and adaptable inputs.

[3] The total number of digital outputs listed includes high-speed outputs.

[4] Extended temperature cards: CANbus p/n: V100-S-CAN, Ethernet p/n V100-S-ET2

[5] To order a classic V350 with a Bezel panel, switch the 'J' in the model number to '33', ex. V350, V350-33- TR20

CE / UL

26   27

VISION 130™

Palm-size, powerful PLC with built-in black & white LCD 2.4", keypad and I/Os, expands up to 256 I/Os.

Features:

HMI

- Size: 2.4"
- Monochrome
- Multi-language display
- Built-in Alarm Screens

PLC

- I/O options including digital, analog , high speed, temperature, and weight measurement
- Expand up to 256 I/Os
- Auto-tune PID, up to 24 independent loops
- Recipe programs and data logging via data tables
- Micro SD card - log, backup, clone & more
- Function Blocks

Communication

Built-in ports:

- 1 RS485/RS232
- 2 ports may be added: 1 Serial/Ethernet/Profibus and 1 CANbus

Protocols:

- MODBUS TCP
- SNMP*
- CANopen, UniCAN, CANlayer2
- BACnet, KNX and M-Bus via gateway
- FB Protocol: for any 3rd party protocol

General Features:

- Web server
- E-mail & SMS
- 3G Modem support
- Remote access utilities

* SNMP V1 Trap, SNMP community Name, SNMP V2C Trap

V130
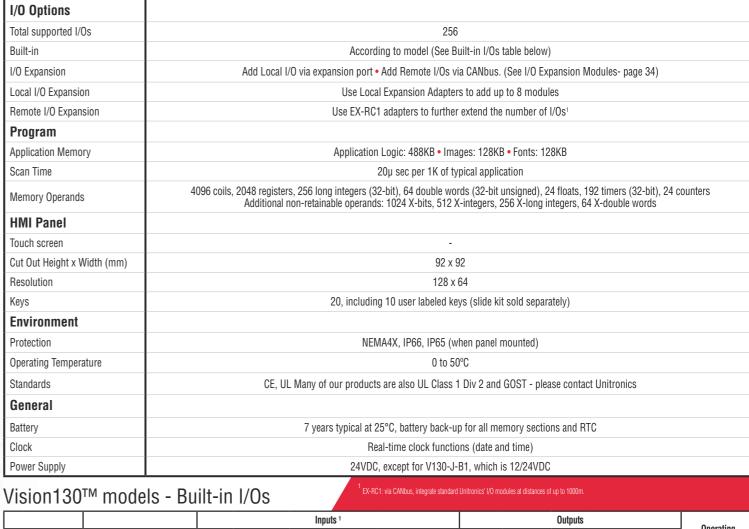
I/O Options	
Total supported I/Os	256
Built-in	According to model (See Built-in I/Os table below)
I/O Expansion	Add Local I/O via expansion port • Add Remote I/Os via CANbus. (See I/O Expansion Modules- page 34)
Local I/O Expansion	Use Local Expansion Adapters to add up to 8 modules
Remote I/O Expansion	Use EX-RC1 adapters to further extend the number of I/Os[1]
Program	
Application Memory	Application Logic: 488KB • Images: 128KB • Fonts: 128KB
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
HMI Panel	
Touch screen	-
Cut Out Height x Width (mm)	92 x 92
Resolution	128 x 64
Keys	20, including 10 user labeled keys (slide kit sold separately)
Environment	
Protection	NEMA4X, IP66, IP65 (when panel mounted)
Operating Temperature	0 to 50ºC
Standards	CE, UL Many of our products are also UL Class 1 Div 2 and GOST - please contact Unitronics
General	
Battery	7 years typical at 25°C, battery back-up for all memory sections and RTC
Clock	Real-time clock functions (date and time)
Power Supply	24VDC, except for V130-J-B1, which is 12/24VDC

Vision130™ models - Built-in I/Os

[1] EX-RC1: via CANbus, integrate standard Unitronics' I/O modules at distances of up to 1000m.

Article [4]	Summary	Inputs [1]				Outputs				Operating Voltage
		Digital[2]	HSC/Shaft-encoder[2]	Analog	Temperature Measurement	Transistor[3]	PWM/HSO[3]	Relay	Analog	
V130-J-B1	No onboard I/Os	—	—	—	—	—	—	—	—	12/24VDC
V130-J-TR20	10 Digital, 2 D/A Inputs[1] 6 Relay Outputs 2 High-speed Transistor Outputs	12	3 200kHz, 32-bit	2 0-10V, 0-20mA, 4-20mA 10-bit	—	2 npn	2 (2 PTO) 200 kHz max	6	—	24VDC
V130-J-R34	20 Digital, 2 D/A Inputs[1] 12 Relay Outputs	22	3 30kHz, 32-bit	2 0-10V, 0-20mA, 4-20mA 10-bit	—	—	—	12	—	24VDC
V130-J-TR34	20 Digital, 2 D/A Inputs[1] 8 Relay, 4 High-speed Transistor Outputs	22	3 200kHz, 32-bit	2 0-10V, 0-20mA, 4-20mA 10-bit	—	4 npn	4 (3 PTO) 200 kHz max	8	—	24VDC
V130-J-TR6	6 Digital, 2 D/A[1] 4 Analog Inputs 6 Relay Outputs 2 High-speed Transistor Outputs	8	1 200kHz, 32-bit	2 0-10V, 0-20mA, 4-20mA and 4 0-20mA, 4-20mA 10-bit	—	2 npn	2 (2 PTO) 200 kHz max	6	—	24VDC
V130-J-RA22	8 Digital, 2 D/A, 2 TC/PT100/ Digital Inputs[1] 8 Relay, 2 Analog Outputs	12	1 30kHz, 32-bit	2 0-10V, 0-20mA, 4-20mA 14-bit	2 Thermocouple, PT100	—	—	8	2 0-10V, 4 -20mA 12-bit	24VDC
V130-J-TRA22	8 Digital, 2 D/A, 2 PT100/ TC/ Digital Inputs[1] 4 Relay, 2 Analog, 4 High-Speed Transistor Outputs	12	1 200kHz, 32-bit	2 0-10V, 0-20mA, 4-20mA 14-bit	2 Thermocouple, PT100	4 npn	4 (2 PTO) 200 kHz max	4	2 0-10V, 4 -20mA 12-bit	24VDC
V130-J-T2	10 Digital, 2 D/A Inputs[1] 12 Transistor Outputs	12	3 30kHz, 32-bit	2 0-10V, 0-20mA, 4-20mA 10-bit	—	12 pnp	7 0.5kHz	—	—	24VDC
V130-J-T38	20 Digital, 2 D/A Inputs [1] 16 Transistor Outputs	22	2 30kHz, 32-bit	2 0-10V, 0-20mA, 4-20mA 10-bit	—	16 pnp	7 0.5kHz	—	—	24VDC
V130-J-TA24	8 Digital, 2 D/A, 2 TC/PT100/ Digital Inputs [1] 10 Transistor, 2 Analog Outputs	12	1 30kHz, 32-bit	2 0-10V, 0-20mA, 4-20mA 14-bit	2 Thermocouple, PT100	10 pnp	5 0.5kHz	—	2 0-10V, 4 -20mA 12-bit	24VDC

[1] In some models certain inputs are adaptable via wiring and software settings, and can function as digital, high-speed, analog, and in certain models as TC or PT100. Adapting requires input pins. This reduces the number of digital inputs. Pin requirements:

- Each high-speed requires 1 or 2 pins according to high-speed mode.
- Each analog input requires 1 pin.
- Each TC requires 2 pins per TC input
- The first PT input requires 3 pins, and two additional pins for each additional PT input.

Example: V130-33-RA22 offers 12 digital inputs. Implementing 2 TC inputs requires 4 pins, leaving 8 pins free. Implementing 2 PT inputs uses 5 input pins.

[2] The total number of digital inputs listed includes high-speed and adaptable inputs.

[3] The total number of digital outputs listed includes high-speed outputs.

[4] To order a classic V130 with a Bezel panel, switch the 'J' in the model number to '35' ex. V130, V130-33-TR20.