

# VISION 1210™ /1040™

Features:

Advanced PLC with a built-in 12.1"/10.4" high-resolution color touch screen. Snap-in I/Os to expand up to 1000 I/Os.

## HMI

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

## PLC

- I/O options include 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

### Add-on ports:

- 1 Serial/Ethernet

### Protocols:

- MODBUS TCP
- SNMP V1
- 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



V1210



V1040



## Snap-in I/O

Plugs directly into the back of your PLC

	Vision 1040	Vision 1210
<b>Article Number</b>	V1040-T20B	V1210-T20BJ
<b>I/O Options</b>		
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 37). Local or Remote I/Os may be added via expansion port or via CANbus (See I/O Expansion Modules- page 36).	
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 <sup>1</sup>	
<b>Program</b>		
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	
<b>HMI Panel</b>		
Color Touchscreen	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
<b>Environment</b>		
Protection	NEMA4X / IP65 when panel-mounted	NEMA4X / IP66, IP65 when panel-mounted
Operating Temperature	32° to 122°F (0 to 50°C)	
Standards	UL, CE, EAC, UL Hazardous Locations, Class I, Division 2 <sup>2</sup>	
<b>General</b>		
Battery	7 years typical at 77°F (25°C), battery back-up for all memory sections and RTC	
Clock	Real-time clock functions (date and time)	
Power Supply	12/24VDC <sup>3</sup>	

<sup>1</sup> EX-RC1- via CANbus, integrate standard Unitronics' I/O modules at distances of up to 1000m.

<sup>2</sup> For a list of relevant models, contact Unitronics.

<sup>3</sup> 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

# VISION 700™

## Features:

### HMI

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

### PLC

- I/O options include 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

#### Add-on ports:

- 1 Serial/Profibus
- 1 CANbus

#### Protocols:

- MODBUS TCP
- SNMP V1
- 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

Advanced PLC with a built-in 7" high-resolution color touch screen. Snap in I/Os to 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

## Vision 700

Article Number	V700-T20BJ
<b>I/O Options</b>	
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 37). Local or Remote I/Os may be added via expansion port or via CANbus (See I/O Expansion Modules- page 36).
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 <sup>1</sup>
<b>Program</b>	
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
<b>HMI Panel</b>	
Color Touchscreen	Resistive, Analog
Cut Out Height x Width (mm)	125 x 193
Resolution	800 x 400 (SVGA)
Keys	Virtual Keyboard
<b>Environment</b>	
Protection	NEMA4X, IP66 and IP65 when panel-mounted
Operating Temperature	32° to 122°F (0 to 50°C)
Standards	UL, CE, EAC, UL Hazardous Locations, Class I, Division 2 <sup>2</sup>
<b>General</b>	
Battery	7 years typical at 77°F (25°C), battery back-up for all memory sections and RTC
Clock	Real-time clock functions (date and time)
Power Supply	12/24VDC <sup>3</sup>

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

<sup>2</sup> For a list of relevant models, contact Unitronics.

<sup>3</sup> 12V applies to PLC power supply only, and not to the I/O.

# VISION 570™ /560™

## Features:

### HMI

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

### PLC

- I/O options include 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

#### Add-on ports:

- 1 Serial/Ethernet

#### Protocols:

- MODBUS TCP
- SNMP V1
- 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

Advanced PLC with a built-in 5.7" high-resolution color touch screen. Snap in I/Os to expand up to 1000 I/Os.



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
<b>Article Number</b>	V570-57-T20B-J	V560-T25B
<b>I/O Options</b>		
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 37). Local or Remote I/Os may be added via expansion port or via CANbus (See I/O Expansion Modules- page 36).	
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 <sup>1</sup>	
<b>Program</b>		
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	
<b>HMI Panel</b>		
Color Touchscreen	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
<b>Environment</b>		
Protection	NEMA4X, IP66, IP65 when panel mounted	NEMA4X, IP65 when panel mounted
Operating Temperature	32° to 122°F (0 to 50°C)	
Standards	UL, CE, EAC, UL Hazardous Locations, Class I, Division 2 <sup>2</sup>	UL, CE, EAC
<b>General</b>		
Battery	7 years typical at 77°F (25°C), battery back-up for all memory sections and RTC	
Clock	Real-time clock functions (date and time)	
Power Supply	12/24VDC <sup>3</sup>	

<sup>1</sup> EX-RC1: via CANbus, integrate standard Unintronics' I/O modules at distances of up to 1000m.

<sup>2</sup> For a list of relevant models, contact Unintronics.

<sup>3</sup> 12V applies to PLC power supply only, and not to the I/O.

# VISION 430™

## Features:

### HMI

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

### PLC

- I/O options include 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

#### Add-on ports:

- 1 Serial/Ethernet/Profibus
- 1 CANbus

#### Protocols:

- MODBUS TCP
- SNMP V1
- 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

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



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

<b>I/O Options</b>	
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 36)
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 <sup>1</sup>
<b>Program</b>	
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
<b>HMI Panel</b>	
Color Touchscreen	Resistive, Analog
Cut Out Height x Width (mm)	91.5 x 122.5
Resolution	480 x 272
Keys	5 programmable
<b>Environment</b>	
Protection	NEMA4X, IP66, IP65 when panel mounted
Operating Temperature	32° to 122°F (0 to 50°C)
Standards	UL, CE, EAC, UL Hazardous Locations, Class I, Division 2 <sup>2</sup>
<b>General</b>	
Battery	7 years typical at 77°F (25°C), battery back-up for all memory sections and RTC
Clock	Real-time clock functions (date and time)

### Vision430™ models - Built-in I/O configurations

<sup>1</sup> EX-RC1, via CANbus, integrate standard Untronics' I/O modules at distances of up to 1000m.  
<sup>2</sup> For a list of relevant models, contact Untronics.

Article	Summary	Digital <sup>1</sup>	Inputs <sup>1</sup>			Outputs				Operating Voltage
			HSC/Shaft-encoder <sup>2</sup>	Analog	Temperature Measurement	Transistor <sup>3</sup>	PWM/HSO <sup>3</sup>	Relay	Analog	
V430-J-B1	No onboard I/Os	—	—	—	—	—	—	—	—	12/24VDC
V430-J-RH2	10 Digital, 2 D/A Inputs <sup>1</sup> 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 <sup>1</sup> 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 <sup>1</sup> 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 <sup>1</sup> 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 <sup>1</sup> 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 <sup>1</sup> 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 <sup>1</sup> 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 <sup>1</sup> 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 <sup>1</sup> 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

<sup>1</sup> 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.

<sup>2</sup> The total number of digital inputs listed includes high-speed and adaptable inputs.  
<sup>3</sup> The total number of digital outputs listed includes high-speed outputs.

# VISION 350™

## Features:

### HMI

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

### PLC

- I/O options include 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

#### Add-on ports:

- 1 Serial/Ethernet/Profibus
- 1 CANbus

#### Protocols:

- MODBUS TCP
- SNMP V1
- 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

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.



V350



**Extended temperature unit available:**  
Operational temperature range -22°F to 140°F (-30°C to 60°C), available for panel Article: V350-JS-TA24.  
Extended temperature available for Ethernet (Article: V100-S-ET2) and CANbus (Article: V100-S-CAN).

<b>I/O Options</b>	
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 36)
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 <sup>1</sup>
<b>Program</b>	
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-retentable operands: 1024 X-bits, 512 X-integers, 256 X-long integers, 64 X-double words
<b>HMI Panel</b>	
Color Touchscreen	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
<b>Environment</b>	
Protection	NEMA4X, IP66, IP65 when panel mounted
Operating Temperature	32 to 122°F (0°C to 50°C), For V350-JS-TA24: -22°F to 140°F (-30°C to 60°C) <sup>2</sup>
Standards	UL, CE, EAC, UL Hazardous Locations, Class I, Division 2 <sup>3</sup>
<b>General</b>	
Battery	7 years typical at 77°F (25°C), battery back-up for all memory sections and RTC
Clock	Real-time clock functions (date and time)

### Vision350™ models - Built-in I/O configurations

<sup>1</sup> EX-RC1, via CANbus, integrate standard Untronics' I/O modules at distances of up to 1000m.  
<sup>2</sup> Extended temperature cards: CANBus p/n: V100-S-CAN, Ethernet p/n: V100-S-ET2.  
<sup>3</sup> For a list of relevant models, contact Untronics.

Article <sup>5</sup>	Summary	Inputs <sup>1</sup>				Outputs				Operating Voltage
		Digital <sup>2</sup>	HSC/Shaft-encoder <sup>2</sup>	Analog	Temperature Measurement	Transistor <sup>3</sup>	PWM/HSO <sup>4</sup>	Relay	Analog	
V350-J-B1	No onboard I/Os	—	—	—	—	—	—	—	—	12/24VDC
V350-J-TR20	10 Digital, 2 D/A Inputs <sup>1</sup> 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 <sup>1</sup> 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 <sup>1</sup> 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 <sup>1</sup> 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 <sup>1</sup> 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 <sup>1</sup> 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 <sup>1</sup> 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 <sup>1</sup> 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 <sup>1</sup>	8 Digital, 2 D/A, 2 TC/PT100/ Digital Inputs <sup>1</sup> 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

<sup>1</sup> 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-JS-RA22 offers 12 digital inputs, implementing 2 TC inputs requires 4 pins, leaving 8 pins free. Implementing 2 PT inputs uses 5 input pins.

<sup>2</sup> The total number of digital outputs listed includes high-speed outputs.  
<sup>3</sup> Extended temperature unit.  
<sup>4</sup> To order a classic V350 with a Bazel panel, switch the 'J' in the model number to '33', ex: V350, V350-33-TR20

# VISION 130™

## Features:

### HMI

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

### PLC

- I/O options include 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

#### Add-on ports:

- 1 Serial/Ethernet/Profibus
- 1 CANbus

#### Protocols:

- MODBUS TCP
- SNMP V1
- 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

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



V130



“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

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 36)
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 <sup>1</sup>
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	32° to 122°F (0 to 50°C)
Standards	UL, CE, EAC, UL Hazardous Locations, Class I, Division 2 <sup>2</sup>
General	
Battery	7 years typical at 77°F (25°C), battery back-up for all memory sections and RTC
Clock	Real-time clock functions (date and time)

### Vision130™ models - Built-in I/O configurations

<sup>1</sup> EX-RC1 via CANbus, integrate standard UniTronics' I/O modules at distances of up to 1000m.  
<sup>2</sup> For a list of relevant models, contact UniTronics.

Article <sup>4</sup>	Summary	Inputs <sup>1</sup>				Outputs				Operating Voltage
		Digital <sup>2</sup>	HSC/Shaft-encoder <sup>2</sup>	Analog	Temperature Measurement	Transistor <sup>2</sup>	PWM/HSD <sup>2</sup>	Relay	Analog	
V130-J-B1	No onboard I/Os	—	—	—	—	—	—	—	—	12/24VDC
V130-J-TR20	10 Digital, 2 D/A Inputs <sup>1</sup> 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 <sup>1</sup> 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 <sup>1</sup> 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 <sup>1</sup> 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 <sup>1</sup> 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-TAA22	8 Digital, 2 D/A, 2 PT100/TC/ Digital Inputs <sup>1</sup> 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 <sup>1</sup> 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 <sup>1</sup> 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 <sup>1</sup> 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

<sup>1</sup> 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.

<sup>2</sup> The total number of digital inputs listed includes high-speed and adaptable inputs.  
<sup>3</sup> The total number of digital outputs listed includes high-speed outputs.

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