



PLC
+ HMI
ALL IN ONE™

One Integrated Solution for Control & Automation

Powerful Software | Full Range of PLCs | Complete Line of VFDs

Outstanding Support

About Unitronics

Unitronics designs, manufactures, and markets advanced control and automation solutions. Our extensive offering includes a complete line of PLCs with integrated HMI, full line of VFDs, a broad array of I/Os and complementary devices, as well as programming software for all aspects of control, motion, HMI, and communications.

Unitronics PLCs range from micro-PLC + HMI units for simple machine control, to complex controllers with advanced functions, a variety of onboard I/Os and multiple communication options – including support for Industry 4.0 (smart factory) technology.

Easy to use, efficient, and affordable, our products have been automating processes, systems and standalone applications since 1989. Today, our field-proven products automate hundreds of thousands of installations in diverse fields, including petrochemicals, automotive, food processing, plastics & textiles, energy & environment, water & waste water management – anywhere automated processes are required.

Unitronics is represented by more than 160 distributors in over 55 countries around the globe, providing our customers with local support in their local languages.

Unitronics Benefits:

- **Full Product Range:** PLC + HMI controllers, I/Os, and VFDs to meet all application needs.
All software and utilities are provided at no additional charge
- **All-in-One Software:** Configure and program PLC, HMI, VFD, and all other components in one easy environment
- **Industry 4.0:** SNMP, FTP, e-mail, SMS, GPRS/GSM, Remote Access via VNC Client / built-in Webserver, SQL & MQTT
- **Rich Features:** Auto-tuned PID, datalogging, Recipes, HMI Trends & Gauges, Alarms, multi-level passwords, multi-language support, Datacom via CANopen, CAN Layer2, MODBUS, EtherNetIP and more
- **Outstanding Support:** Unitronics exceeds the industry standard for customer care. You benefit from personalized, expert sales and technical support without fees or tiers
- **Customized Solutions:** According to customers' specifications



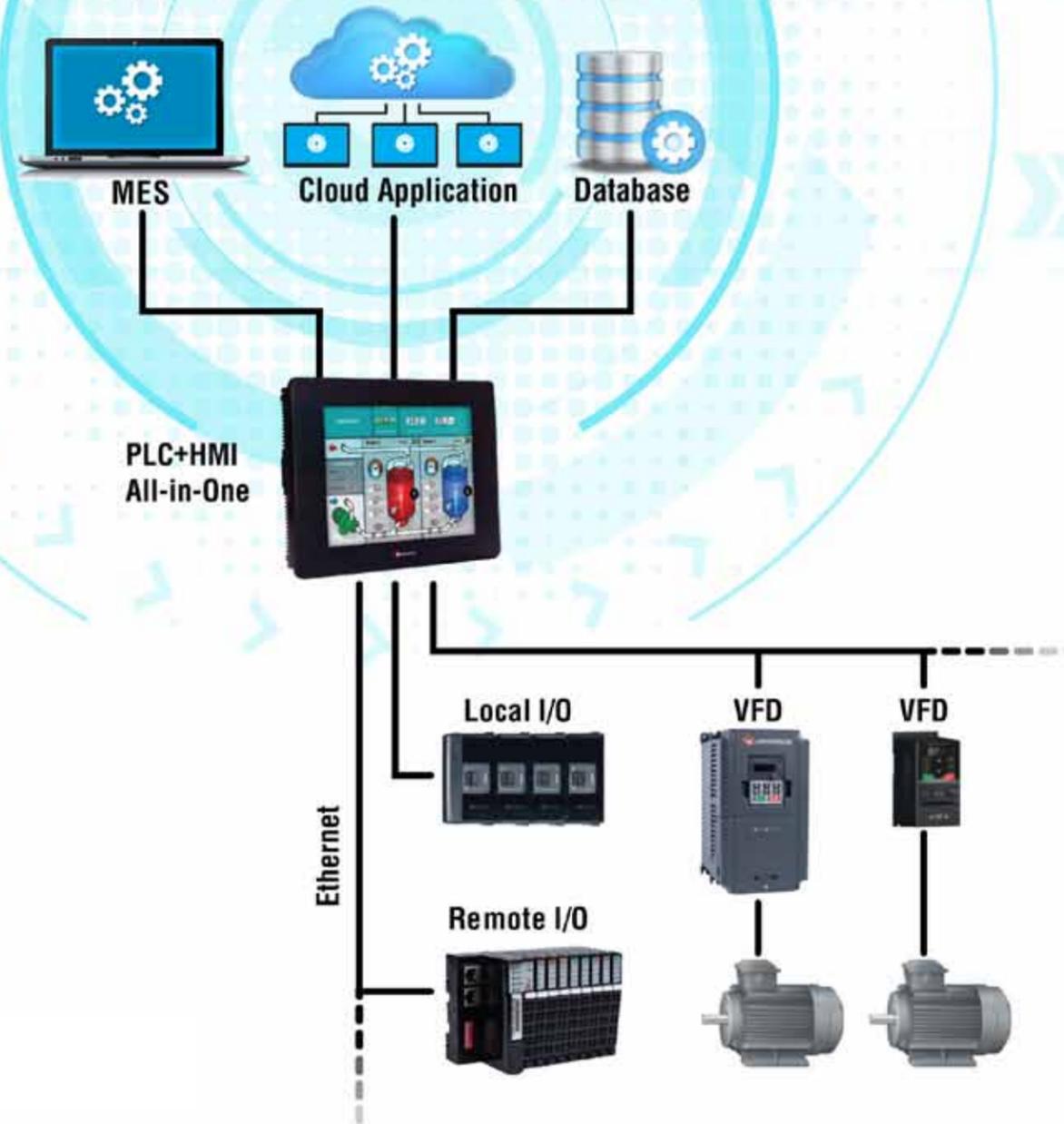
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Before you place an order, please check the complete technical specifications for each product, located in the Unitronics website www.unitronicsplc.com.

One Integrated Solution for Control and Automation



Complete Range of PLC+HMI

- Powerful, Multi-function Controllers
- Up to 2048 I/Os per controller
- Quality HMI
- Field-hardened
- Award-winning

Full Range of VFDs

- Easy to Program
- Simple to Use
- Setup & Program via Software or VFD Keypad

All-in-One Programming Software

- Program Ladder Logic
- Design HMI & Web pages
- Configure VFDs
- Hardware & Communication Configuration
- One Easy Environment

Total Solution for Industry 4.0

- MQTT
- SQL
- FTP
- SNMP
- Built-in Web Server
- Remote Access via free phone APP
- Smart Factory Technology



UNISTREAM®

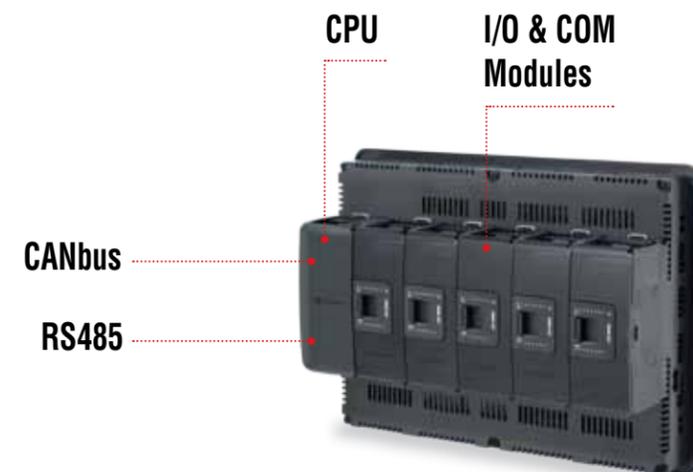
Powerful Award-winning Programmable Logic Controllers

For high-end automation projects, available in two All-in-One series:
Modular & Built-in.

UniStream® Modular

Create a custom control solution, perfectly matched to your requirements

Uniquely designed to enable you to create a customized controller in three steps: select an HMI panel, snap in a CPU, and add any I/O or communication modules necessary for your specific application.



UniStream® Built-in

Space-saving PLC that delivers the functionality to control complex machines

PLC+HMI+I/O built into a single, superbly compact unit in a range of built-in I/O configurations. Available in two versions: Built-in and Built-in Pro.



UniLogic®-UniStream®

All-in-One Programming Software

UNILOGIC®
Studio

Ultimate All-in-One programming environment: configure hardware & communications, program Ladder, design HMI & web pages, configure & control VFDs and more.

New! Configure & Operate...

Unitronics VFDs using the same, efficient software

Build-it-Once...

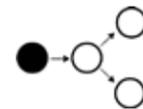
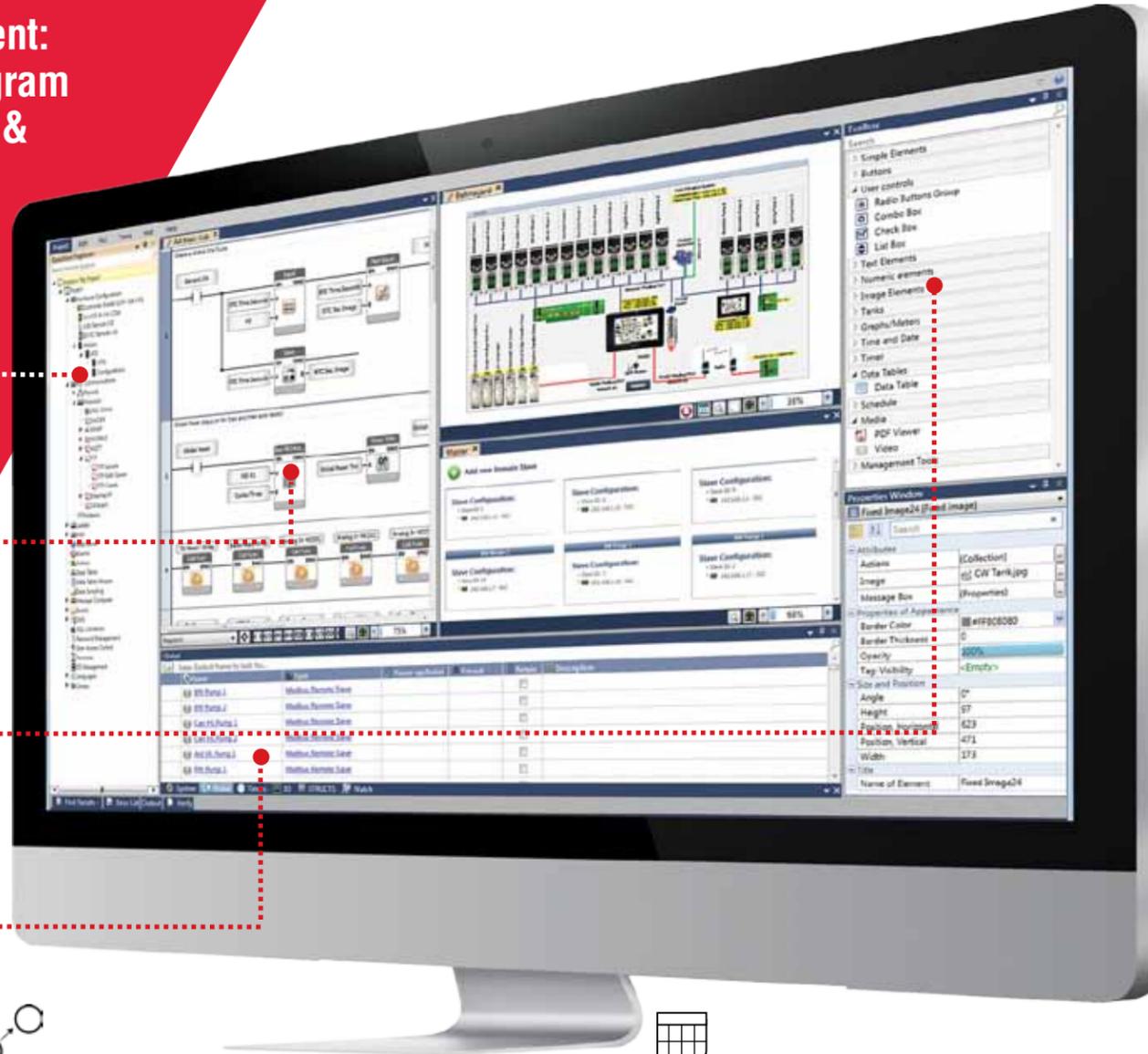
Reuse Library: Functions, HMI & Webpages

Context-sensitive...

Toolbox for Ladder, HMI & Web Elements

Power from C...

Structs & C Functions



MQTT

Via MQTT, UniStream bridges between the production floor all the way up to the MES. Supports MQTT as a 'client' that can both publish and subscribe to messages.



Structs - Tag Database on Steroids

You create Structs - groups of data tags of different types organized into a single, logical unit - and reuse them across programs, especially with UDFBs (User Defined Function Blocks). UniLogic's built-in Structs enable you to configure and control hardware and complex functions such as Communications and PID.



Speed Ladder Programming - plus "C" Power

Build your Ladder: drag & drop elements that snap into place, error-free. Use the built-in C Function editor to write C functions. UniLogic means you 'write-it-once': create code to use, reuse, and export across projects. Create UDFBs (User Defined Function Blocks) - self-contained functions for tasks such as oven control, motor control, level control, etc.



Power Data Tools - Data Sampler, Data Tables, Recipes, SQL

Data Samplers record dynamic application data, such as output values, at fixed intervals into files and display it as Trend graphs on the HMI. Data Tables organize and manipulate data via Ladder, create data logs, implement Recipes, import/export values from/to Excel, allow users to enter/edit data into Data Tables via HMI panel, and more. NEW SQL Connector: Access SQL databases, run Queries, connect Data Tables to SQL.



Web Server: Web Pages - No HTML Required

Design elegant web pages via a drag & drop interface, identical to the HMI editor. A rich graphic library is at your disposal. The Web toolbox offers user controls and widgets, enabling the end user to view and enter application data via any web browser.



Design Beautiful HMI Displays - Stream Video, Audio, PDF

UniLogic's extensive free graphics library & HMI widgets enable you to be a graphic artist. The easy HMI editor supports layers, image transparency, overlap, rotation--plus drag & drop widgets, Video & Audio players, Data Tables, Trend graphs & Gauges to display run-time values, and more.



Build-it-Once, then Reuse - the Ultimate Time Saver

Add your UDFBs, HMI screens, HMI Custom Controls, and Web Pages to the Library--then drag & drop them where needed; UniLogic takes care of the tags. Import your Library into any project, and share it with others.



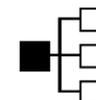
Languages - from Italian to Chinese at the Touch of a Button

UniLogic supports any language that you can type - including Asian languages such as Chinese, Japanese, and Korean. Instantly switch HMI language via user actions or program events.



Built-in Alarms - Easily Boost Application Safety

Compliant with ISA 18.2 standard guidelines for Alarm Management systems in the process industries. Detect & analyze Alarms, and take action. Export Alarm Logs via FTP to send via email, or copy directly from the controller via Flash Drive. Alarms feature full multi-language support.



Communications - Configuration not Programming

Incredibly fast, easy to configure and implement, UniStream data communications run independently of Ladder. A single PLC can contain multiple slave definitions--and multiple master definitions. Communicate with any device: plug-and-play protocols such as MODBUS, CANopen, SNMP, MQTT, and EtherNet/IP. Use Message Composer to communicate with devices such as frequency converters and bar-code readers via any Ethernet, CANbus or serial 3rd-party protocol. Also supports CANLayer 2, FTP Client/Server, SMS, email, GSM/GPRS modem.

UNISTREAM® Modular

Features:

HMI

- Size: 7", 10.4" or 15.6"
- High quality color touchscreen. UniStream 10.4" is also available with Multi-Touch screen
- Multi-language display
- Built-in Alarm Screens
- Media support: Video, Audio and PDF viewer
- Multi-level password protection – easy and fast

PLC

- I/O options include digital, analog, high speed, temperature, and weight measurement
- Expand locally: up to 2048 I/Os
- Expand remotely: via UniStream Ethernet-based I/O
- Auto-tune PID, up to 64 independent loops
- Recipes & data logging via data tables & sampling
- MicroSD card - log, backup, clone & more
- Function Blocks & Structs

Communication

Built-in ports:

- 1 CANbus
- 2 Ethernet TCP/IP
- 1 RS485
- 2 USB host
- 1 Mini USB for programming

Add-on ports:

- Up to 8 RS232 (Using UAC-02RS2)
- Up to 4 RS232 + 4 RS485 (Using UAC-02RSC)

Protocols:

- MQTT Client
- EtherNet/IP
- MODBUS: Serial & TCP/IP
- CANopen, CANlayer2, UniCAN
- SNMP
- BACnet, KNX and M-Bus via gateway
- Message Composer for 3rd party protocols

General Features:

- SQL Client
- Web Server
- FTP server & client
- E-mail & SMS
- Remote access via VNC
- 3G Modem support

3 steps to an All-in-One controller: select HMI panel, add the powerful CPU, and snap on any I/O and COM modules. Expands up to 2048 I/Os.



UniStream® 7"



Available with Multi-Touch

UniStream® 10.4"



UniStream® 15.6"

	UniStream 7	UniStream 10.4	UniStream 15.6
Article Number	USC-P-B10 • USP-070-B08/USP-070-B10	USC-P-B10 • USP-104-B10/USP-104-M10	USC-P-B10 • USP-156-B10
I/O Options	2048 (See I/O Expansion Modules- page 15)		
Total supported I/Os			
Onboard I/O modules	Fit up to 3 slim or 2 wide I/Os ¹	Fit up to 5 slim or 3 wide I/Os ¹	
I/O Expansion	Use Local Expansion Adapters to add up to 80 slim or 50 wide modules ¹		
Remote I/O via Ethernet	Use UniStream Ethernet-based Remote I/O adapters to add I/Os via Ethernet (See I/O Expansion Modules - page 16)		
Add-on COM modules	Supports up to 3 COM modules ¹	Supports up to 4 COM modules ¹	
Program			
Application Memory	8 MB		
HMI Panel			
Color Touchscreen	Resistive, Analog	Resistive, Analog / Multi-Touch	Resistive, Analog
Viewing Area Height x Width (mm)	USP-070-B08: 152.4 x 91.44 USP-070-B10: 154.08 x 85.92	211.2 x 158.4	344.23 x 193.53
Cut Out Height x Width (mm)	134.0 x 196.0	214.0 x 281.0	249.0 x 395.0
Resolution	800 x 480 (WVGA)	800 x 600 (SVGA)	1366 x 768
Keys	Virtual Keyboard		
Environment			
Protection	NEMA4X, IP66, IP65 when panel-mounted ²		
Operating Temperature	-4°F to 131°F (-20°C to 55°C)		32°F to 122°F (0°C to 50°C)
Standard	UL, CE, EAC, UL Hazardous Locations, Class I, Division 2 ⁴		
General			
Battery	4 years typical at 77°F (25°C), battery back-up for memory and RTC		
Clock	Real-time clock functions (date and time)		
Power Supply	12/24VDC ³		

Local Expansion Adapters

UAG-XK125	Short Range Kit, 125 cm
UAG-XKP125	Short Range + embedded Power Supply Kit, 125 cm
UAG-XK300	Short Range Kit, 300 cm
UAG-XKP300	Short Range Kit + embedded Power Supply, 300 cm
UAG-XKPLXXX	Long Range + embedded Power Supply, lengths: 600, 1200, 1500, 2000, 3000cm

Uni-COM™ Communication Modules¹

UAC-01RS2	1x RS232
UAC-02RS2	2x RS232
UAC-02RSC	1x RS232 port and 1x RS485 port

¹ Add-on Modules, I/O and COM: the total number of modules, both I/O and COM that you can snap onboard an HMI panel is limited by the size of the panel.

I/O modules are "Slim" & "Wide". 1 "Wide" I/O module = 1.5 "Slim" or COM module.

² UniStream complies with IP66 and NEMA4X only if the speaker seal is installed. Refer to HMI panel installation guide.

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

⁴ For a list of relevant models, contact Unitoronics

UNISTREAM® Built-in

Features:

HMI

- Size: 5", 7"
- High quality color touchscreen
- Multi-language display
- Built-in Alarm Screens
- Media support: Video*, Audio* and PDF viewer
- Multi-level password protection –easy and fast

PLC

- I/O options include digital, analog, high speed, temperature, and weight measurement
- Expand locally: up to 2048 I/Os
- Expand remotely: via UniStream Ethernet-based I/O
- Auto-tune PID, up to 64 independent loops
- Recipes & data logging via data tables & sampling
- MicroSD card - log, backup, clone & more
- Function Blocks & Structs

Communication

Built-in ports:

- 1 Ethernet TCP/IP
- 1 USB host
- 1 Mini USB for programming

Add-on ports:**

- 1 CANbus
- 1 RS485
- 1 RS232

Protocols:

- MQTT Client
- EtherNet/IP
- MODBUS TCP
- CANopen, CANlayer2, UniCAN
- SNMP
- BACnet, KNX and M-Bus via gateway
- Message Composer for 3rd party protocols

General Features:

- SQL Client*
- Web Server*
- E-mail & SMS
- Remote access via VNC
- FTP server & client
- 3G Modem support

Powerful PLC in a superbly compact hardware profile: PLC+HMI+I/Os built into one single unit. Available in two versions: Built-in and Built-in Pro. Expands up to 2048 I/Os.



UniStream® 5"



UniStream® 7"

	UniStream 5	UniStream 7
I/O Options		
Total supported I/Os	2048	
Built-In	According to model (See Built-in I/Os configurations- page 14)	
I/O Expansion	Add Local I/O via expansion port (See I/O Expansion Modules - page 15) ¹	
Remote I/O via Ethernet	Use UniStream Ethernet-based Remote I/O adapters to add I/Os via Ethernet (See I/O Expansion Modules - page 16)	
Add-on COM Modules	Add up to 3 COM modules ²	
Program		
Application Memory	8 MB	
HMI Panel		
Color Touchscreen	Resistive, Analog	
Viewing Area Height x Width (mm)	108 x 64.8	
Cut Out Height x Width (mm)	93.2 x 148.2	
Resolution Height x Width (mm)	800 x 480 (WVGA)	
Keys	Virtual Keyboard	
Environment		
Protection	NEMA4X, IP66, IP65 when panel-mounted	
Operating Temperature	-4°F to 131°F (-20°C to 55°C)	
Standard	CE, UL, EAC ³	
General		
Battery	4 years typical at 77°F (25°C), battery back-up for memory and RTC	
Clock	Real-time clock functions (date and time)	

Local Expansion Adapters

UAG-CX-XKP125	UniStream CX IO Exp.Kit 1.25m
UAG-CX-XKP300	UniStream CX IO Exp.Kit 3m

Uni-COM™ Communication Modules

UAC-CX-01RS2	Uni-COM: 1x RS232 port
UAC-CX-01RS4	Uni-COM: 1x RS485 port
UAC-CX-01CAN	Uni-COM: 1x CANbus port

¹ UniStream 5" I/O Expansion: the first unit plugged into the I/O expansion jack must be from the CX series I/O expansion - UAG-CX-XKP125 or UAG-CX-XKP300.

The CX end unit may be followed by Uni-I/O modules or UAG-XKPLxxxx adapters.

² Up to 2 serial modules and one CANbus module.

³ For a list of relevant models, contact Unitronics.

Article*	Summary	Inputs				Outputs				Operating Voltage
		Digital (Isolated)	HSC/Shaft-encoder ¹	Analog	Temperature inputs, RTD/TC	Transistor ² (Isolated)	PWM ²	Relay	Analog	
US5-B5-B1 US5-B10-B1 US7-B5-B1 US7-B10-B1	No built-in I/Os	-	-	-	-	-	-	-	-	12/24VDC
US5-B5-TR22 US5-B10-TR22 US7-B5-TR22 US7-B10-TR22	10 Digital Inputs, 2 Analog Inputs, 2 Transistor Outputs, npn, including 2 PWM Outputs, 8 Relay Outputs	10 Sink/Source	-	2 0-10V, 0-20mA, 4-20mA 12-bit	-	2 Sink (npn)	2 30kHz	8	-	24VDC
US5-B5-T24 US5-B10-T24 US7-B5-T24 US7-B10-T24	10 Digital Inputs, 2 Analog Inputs, 12 Transistor Outputs, npn, including 2 PWM Outputs	10 Sink/Source	-	2 0-10V, 0-20mA, 4-20mA 12-bit	-	12 Source (pnp)	2 3kHz	-	-	24VDC
US5-B5-RA28 US5-B10-RA28 US7-B5-RA28 US7-B10-RA28	14 Digital Inputs, including 2 HSC, 2 Analog Inputs, 2 Temperature Inputs, 8 Relay Outputs, 2 Analog Outputs	14 Sink/Source	2 90kHz 32-bit	2 (isolated) 0-10V, 0-20mA, 4-20mA 14-bit	2 (isolated) Thermocouple, PT100/NI100/ NI120/ PT1000/NI1000	-	-	8	2 0-10V 12-bit, ±10V, 11-bit+sign 0-20mA, 4-20mA 12-bit	24VDC
US5-B5-TA30 US5-B10-TA30 US7-B5-TA30 US7-B10-TA30	14 Digital Inputs, including 2 HSC, 2 Analog Inputs, 2 Temperature Inputs, 10 Transistor outputs, npn, including 2 PWM Outputs, 2 Analog Outputs	14 Sink/Source	2 90kHz 32-bit	2 (isolated) 0-10V, 0-20mA, 4-20mA 14-bit	2 (isolated) Thermocouple, PT100/NI100/ NI120/ PT1000/NI1000	10 Source (pnp)	2 3kHz	-	2 0-10V 12-bit, ±10V 11-bit+sign 0-20mA, 4-20mA 12-bit	24VDC
US5-B5-R38 US5-B10-R38 US7-B5-R38 US7-B10-R38	24 Digital Inputs, including 4 HSC, 2 Analog Inputs, 12 relay Outputs	24 Sink/Source	4 90kHz 32-bit	2 0-10V, 0-20mA, 4-20mA 12-bit	-	-	-	12	-	24VDC
US5-B5-T42 US5-B10-T42 US7-B5-T42 US7-B10-T42	24 Digital Inputs, including 4 HSC, 2 Analog Inputs, 16 Transistor Outputs, npn, including 2 PWM Outputs	24 Sink/Source	4 90kHz 32-bit	2 0-10V, 0-20mA, 4-20mA 12-bit	-	16 Source (pnp)	2 3kHz	-	-	24VDC

*Models R38-T42, as well as all standard (B5) models will be soon UL certified.
¹ Note that the high-speed inputs are included in the total number of digital inputs.
² Note that the PWM outputs are included in the total number of transistor outputs.

Expand Locally via Uni-I/O™

UniStream Modular & Built-in - Expand up to 2048 I/O via Uni-I/O modules.

	Article Number	Inputs				Outputs			
		Digital (Isolated)	HSC/Shaft-encoder ⁴	Analog	Temperature Measurement	Transistor ⁵ (Isolated)	PWM/HSO ⁵	Relay	Analog
Digital	UID-1600	16 Sink/Source	—	—	—	—	—	—	—
	UID-0808T	8 Sink/Source	—	—	—	8 Source(pnp)	—	—	—
	UID-W1616T ³	16 Sink/Source	—	—	—	16 Source(pnp)	—	—	—
	UID-0808THS ¹	8 Sink/Source	2 250kHz 32-bit	—	—	8 Source(pnp)	2 ² 250kHz 2 3kHz	—	—
	UID-0016T	—	—	—	—	16 Source(pnp)	—	—	—
	UID-0808R	8 Sink/Source	—	—	—	—	—	8	—
	UID-W1616R ³	16 Sink/Source	—	—	—	—	—	16	—
Analog and Temperature	UID-0016R	—	—	—	—	—	—	16	—
	UIA-0006	—	—	—	—	—	—	—	6 (Isolated) 0-10V 14-bit, ±10V 13-bit+sign, 0-20mA, 4-20mA 13-bit
	UIA-0402N	—	—	4 0-10V, 0-20mA, 4-20mA 13-bit	—	—	—	—	2 0-10V 14-bit, ±10V 13-bit+sign, 0-20mA, 4-20mA 13-bit
	UIA-0800N	—	—	8 0-10V, 0-20mA, 4-20mA 13-bit	—	—	—	—	—
	NEW! UIA-0800NH	—	—	8 0-20mA, 4-20mA With HART communication	—	—	—	—	—
	UIS-04PTN	—	—	—	4 PT100/NI100/NI120	—	—	—	—
	UIS-04PTKN	—	—	—	4 PT1000/NI1000/NI1200	—	—	—	—
Digital/Analog	UIS-08TC	—	—	—	8 (Isolated) Thermocouple	—	—	—	—
	UIS-WCB1 ^{1,3}	10 Sink/Source	2 10kHz 32bit	2 (Isolated) 0-10V, 0-20mA, 4-20mA 14-bit	2 (Isolated) Thermocouple, PT100/NI100/NI120	2 ⁵ Sink (npn)	2 250kHz	8	2 0-10V 14-bit, ±10V 13-bit+sign, 0-20mA, 4-20mA 13-bit
	UIS-WCB2 ^{1,3}	10 Sink/Source	2 10kHz 32bit	2 (Isolated) 0-10V, 0-20mA, 4-20mA 14-bit	2 (Isolated) Thermocouple, PT100/NI100/NI120	8 Source (pnp) 2 ⁵ Sink(npn)	2 250kHz (Sink outputs only)	—	2 0-10V 14-bit, ±10V 13-bit+sign, 0-20mA, 4-20mA 13-bit

¹ This module utilizes two high speed blocks that can each be assigned either to the inputs or to the outputs.
² 2 outputs are high-speed, up to 250kHz, function as normal or high-speed PWM (same freq, and different duty-cycles). 2 outputs are normal speed, function as normal-speed PWM outputs (same freq, and same duty cycle).
³ Width: 1 'wide' I/O module = 1.5 'slim' I/O modules
⁴ Note that the high-speed inputs are included in the total number of digital inputs.
⁵ Note that the high-speed outputs are included in the total number of digital outputs.
⁶ Not isolated

DIN Rail Power Supplies

UAP-24V24W	24V 24V 1A
UAP-24V60W	60W 24V 2.5A
UAP-24V96W	96W 24V 4A

Modems

GSM-KIT-17J-3G	Cinterion GPRS modem, EHS6T, 3G
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Remote I/O

- Ethernet based
- Up to 63 I/O modules per adapter
- Slim modules - only 12mm
- 16-bit Analog Resolution
- Operating temperature: -40°F to 158°F (-40°C to 70°C)



NEW!

Remote I/O Adapter

Article Number	Description
URB-TCP	UniStream Remote IO Ethernet Adapter

Input Modules

Article	Description	Digital	HSC/Shaft encoder	Analog	Temperature Measurements
URD-0800	8 Digital inputs (sink or source), 10RTB	8	-	-	-
URA-04000	4 Analog Current Inputs 12bit, 10RTB	-	-	4	-
URA-08000	8 Analog Current Inputs 12bit, 10RTB	-	-	8	-
URA-0400P	4 Analog Voltage Inputs 12bit, 10RTB	-	-	4	-
URA-0800P	8 Analog Voltage Inputs 12bit, 10RTB	-	-	8	-
URA-0400T	4 Analog Current Inputs 16bit, 10RTB	-	-	4	-
URA-0400U	4 Analog Voltage Inputs 16bit, 10RTB	-	-	4	-
URS-04TC (Coming soon)	4 Thermocouple, 10RTB	-	-	-	4
URS-04RT (Coming soon)	4 RTD, 10RTB	-	-	-	4
URD-0400C (Coming soon)	4 Digital inputs, 240VAC, 10RTB	4	-	-	-
URD-0400B (Coming soon)	4 Digital inputs, 120VAC, 10RTB	4	-	-	-
URD-0200D (Coming soon)	2 Shaft Encoder, 10RTB	-	2	-	-
URD-0200E (Coming soon)	2 High Speed Counter, 10RTB	-	2	-	-

Output Modules

Article	Description	Outputs		
		Transistor	Relay	Analog
URD-0004RH	4 Relay Outputs, 10RTB	-	-	-
URD-0008NH	8 Digital Outputs (Sink), 10RTB	8 (Sink)	-	-
URD-0008CH	8 Digital Outputs (Source), 10RTB	8 (Source)	-	-
URA-0004W	4 Analog Current Outputs 12bit, 10RTB	-	-	4
URA-0008W	8 Analog Current Outputs 12bit, 10RTB	-	-	8
URA-0004X	4 Analog Voltage Outputs 12bit, 10RTB	-	-	4
URA-0008X	8 Analog Voltage Outputs 12bit, 10RTB	-	-	8
URA-0004Y	4 Analog Current Outputs 16bit, 10RTB	-	-	4
URA-0004Z	4 Analog Voltage Outputs 16bit, 10RTB	- </tr		

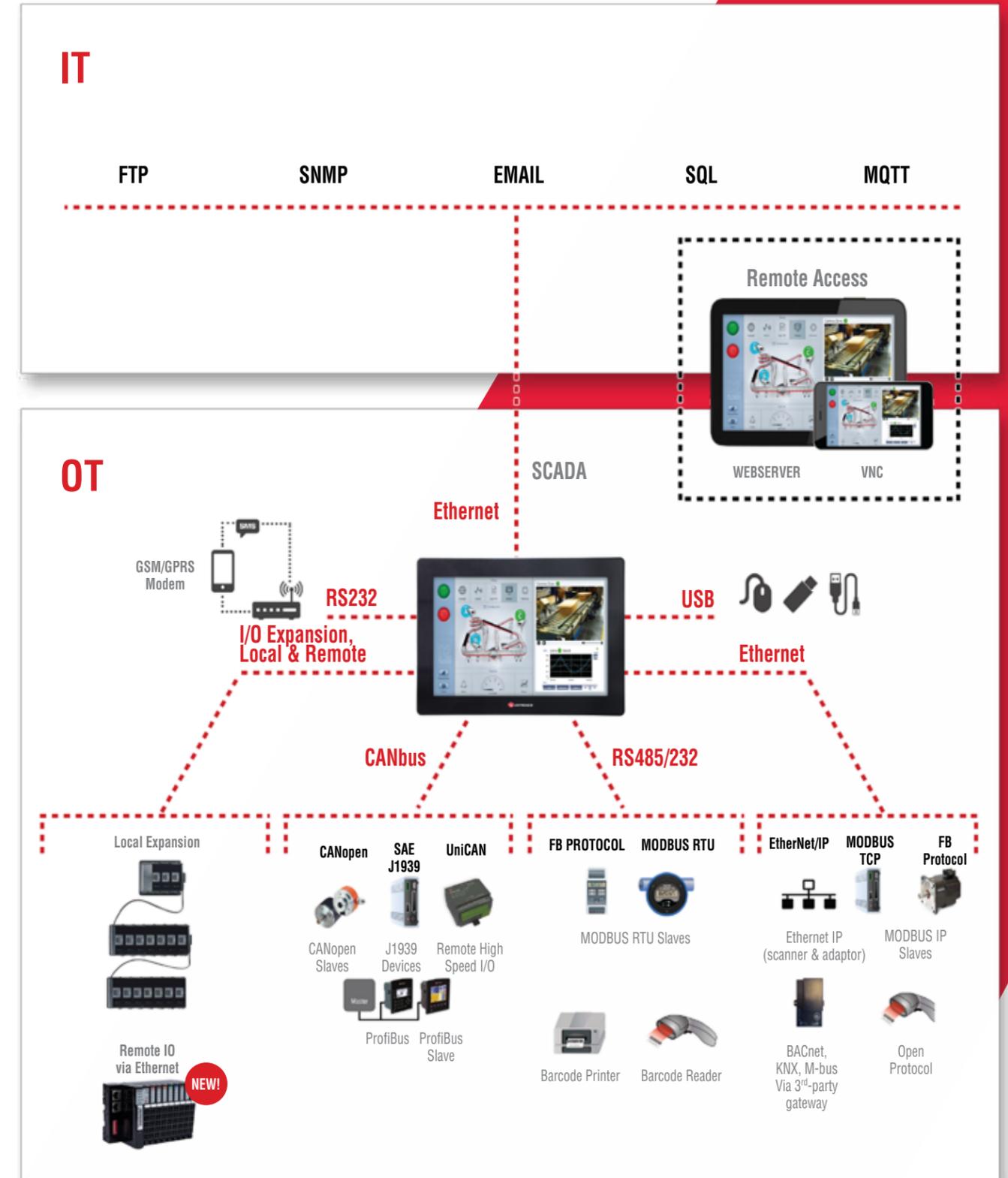
Power Module

Article Number	Description
URP-PS24V ¹	Input 24VDC, Output system Power 5VDC/1A

¹ To be used when the required system current exceeds 1.5A

From OT to IT

Bridge the Gap with UniStream® series



VisiLogic™ - Vision™ and Samba™ All-in-One programming software

A single, intuitive environment for all your application needs



Hardware Configuration

Intuitive set up: controller, I/Os, and COM channels



Ladder Programming

Rapidly drag & drop elements and Function Blocks



HMI Application

Create beautiful HMI displays – includes rich image library



Alarms: Built-in Screens

Effectively alert staff via Alarm screens



Languages - String Library

Instantly switch HMI language via screen touch



Data Tables

Create logs, import/export data, implement recipes



Trend Graphs

Display dynamic values in real-time



Web Server

Display and edit application values via browser

Smart Utilities – Remote Access, Efficient Data Management, and more

Utility Name	Function	Key Features	Targeted Users
Remote Access 	View and control a PLC directly from PC, via local or remote connection	<ul style="list-style-type: none"> View an HMI panel: use the PC keyboard + mouse to run the HMI application Operand and Data Table values: view values during runtime, import and export values to/from Excel/.csv files 	<ul style="list-style-type: none"> Operators requiring Remote Access System integrators: remote debugging, troubleshooting, fault-finding
Remote Operator 	Simultaneously view and operate the HMI panels of multiple PLCs in multiple locations	<ul style="list-style-type: none"> Easily place HMI panels side-by-side to monitor distributed systems or applications in several locations Run the HMI applications via PC keyboard + mouse 	<ul style="list-style-type: none"> Control room operators Installation managers
DataXport 	Create Data Logs from Data Tables and operand values in PLCs	<ul style="list-style-type: none"> Harvest data from multiple PLCs on demand or according to time/date Export the data to ± Excel/.csv files Automatically email files 	<ul style="list-style-type: none"> Data analysts Plant managers Process engineers
UniDownload Designer 	Create compressed VisiLogic / U90Ladder applications (.udc files) for secure installation in local or remote PLCs	<ul style="list-style-type: none"> Prevent end-users from uploading and opening the application Include an OS to be installed at download Set a download channel, restrict end-user actions after installation and more 	OEMs / System Integrators can: <ul style="list-style-type: none"> Protect source code Enable customers to install an application without using VisiLogic or U90Ladder
Download Manager & UniDownloader 	Securely install .udc applications in local or remote PLCs	<ul style="list-style-type: none"> Download Manager: installs the same application in multiple PLCs UniDownloader: installs an application in a single PLC 	OEMs / System Integrators in installations with high security requirements
SD Card Suite 	Remotely access and manage SD cards and their data	<ul style="list-style-type: none"> Browse a remote PLC's SD card Read/write data, including Data Table files View SD card contents - Trends, logs, alarm history, data tables - export to Excel 	<ul style="list-style-type: none"> Data analysts Plant managers Process engineers
UniVision Licensing 	Safeguard your PLC application security	<ul style="list-style-type: none"> Embeds unique licenses in the PLC, which enables application to run only on a licensed PLC Option to activate or deactivate different sections of your application Prevents theft of applications 	<ul style="list-style-type: none"> System integrators OEMs
UniOPC Server 	Exchange data between Unitronics PLCs and OPC-supported software	<ul style="list-style-type: none"> Create channel to connect PLCs to SCADA systems, such as plant control rooms Compliant with the OPC foundation standards 	Control room operators
UniDDE 	Exchange data with Windows based applications	Enables data exchange between Unitronics PLCs and software that supports Microsoft's Dynamic Data Exchange protocols, like Excel	Control rooms operators
Programming tools for developers 	Easily implement communication between PLC & PC applications	Using ActiveX & .NET communication drivers	Developers

Software features vary according to controller model

VISION 1210™ / 1040™

Features:

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

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.



V1210



V1040



Snap-in I/O

Plugs directly into the back of your 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 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 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		
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
Environment		
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 ²	
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)	
Power Supply	12/24VDC ³	

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

² For a list of relevant models, contact Unitronics.

³ 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
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 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 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	
Color Touchscreen	Resistive, Analog
Cut Out Height x Width (mm)	125 x 193
Resolution	800 x 400 (SVGA)
Keys	Virtual Keyboard
Environment	
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 ²
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)
Power Supply	12/24VDC ³

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

² For a list of relevant models, contact Unitronics.

³ 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
Article Number	V570-57-T20B-J	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 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 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		
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
Environment		
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 ²	UL, CE, EAC
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)	
Power Supply	12/24VDC ³	

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

² For a list of relevant models, contact Unitronics.

³ 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

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 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 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	
Color Touchscreen	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	32° to 122°F (0 to 50°C)
Standards	UL, CE, EAC, UL Hazardous Locations, Class I, Division 2 ²
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)

Vision430™ models - Built-in I/O configurations

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

Article	Summary	Digital ²	Inputs ¹			Outputs				Operating Voltage
			HSC/Shaft-encoder ²	Analog	Temperature Measurement	Transistor ³	PWM/HO 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 nnp	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 nnp	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.

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 between -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).

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 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 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	
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
Environment	
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) ²
Standards	UL, CE, EAC, UL Hazardous Locations, Class I, Division 2 ³
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)

Vision350™ models - Built-in I/O configurations

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

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 ⁴	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 unit.
⁵ To order a classic V350 with a Bezel 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 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	32° to 122°F (0 to 50°C)
Standards	UL, CE, EAC, UL Hazardous Locations, Class I, Division 2 ²
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

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

Article ⁴	Summary	Inputs ¹				Outputs				Operating Voltage
		Digital ²	HSC/Shaft-encoder ²	Analog	Temperature Measurement	Transistor ³	PWM/HZO 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.

Features:

HMI

- Size: 3.5", 4.3", 7"
- High quality color touchscreen
- Multi-language display
- Built-in Alarm Screens

PLC

- I/O options include digital, analog, and high speed
- Auto-tune PID, up to 2 independent loops
- Recipe programs and data logging via data tables
- Function Blocks

Communication

Built-in ports:

- 1 Mini USB for programming for 4.3" & 7" models,
- 1 RS232 for 3.5" model

Add-on ports:

- 1 Serial/Ethernet
- 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:

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

Full-function PLC with built-in, high-resolution full-color touch screen and built-in I/O configuration. Great look, incredible price.



SAMBA 3.5"



SAMBA 4.3"



SAMBA 7"

SAMBA

Article Number	SAMBA 3.5	SAMBA 4.3	SAMBA 7
I/O Options			
Total supported I/Os	22		
Built-in	According to model (See Built-in I/Os table below)		
I/O Expansion	-		
Remote I/O Expansion	Use EX-RC1 adapters to further extend the number of I/Os ¹		
COM Modules	Fit up to 1 CANbus, 1 RS232/RS485 ³ or 1 Ethernet		
Program			
Application Memory	Application Logic: 80KB • Images: 1.5 MB • Fonts: 320 KB	Application Logic: 192KB • Images: 3 MB • Fonts: 320 KB	Application Logic: 192KB • Images: 8 MB • Fonts: 512 KB
Scan Time	15µs per 1K of typical application		
Memory Operands	512 coils, 256 registers, 32 long integers (32-bit), 32 double words (32-bit unsigned), 24 floats, 32 timers (32-bit), 16 counters. Additional non-retainable operands: 64 X-bits, 32 X-integers, 16 X-long integers, 16 X-double words (32-bits unsigned)		
HMI Panel			
Color Touchscreen	Resistive, Analog		
Cut Out Height x Width (mm)	92 X 92	122.5 X 91.5	193 X 125
Resolution	320 X 240 (QVGA)	480 X 272	800 x 480 (WVGA)
Keys	Displays virtual keyboard when the application requires data entry		
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 ²		
General			
Battery	7 years typical at 77°F (25°C), battery back-up for RTC and system data, including variable data		
Clock	Real-time clock functions (date and time)		

Samba™ models - Built-in I/O configurations

¹ EX-RC1: via CANbus, integrate standard Untronics' I/O modules at distances of up to 1000m. Refer to website for more information.
² For a list of relevant models, contact Untronics.

Article	Summary	Inputs ¹				Outputs				Operating Voltage
		Digital ²	HSC/Shaft-encoder ²	Analog	Temperature Measurement	Transistor ³	PWM/HSO ³	Relay	Analog	
SM35-J-R20 SM43-J-R20 SM70-J-R20	10 Digital, 2 D/A Inputs ⁴ , 8 Relay Outputs	12	1 30kHz, 32-bit	2 0-10V, 0-20mA, 4-20mA 10-bit	—	—	—	8	—	24VDC
SM35-J-T20 SM43-J-T20 SM70-J-T20	10 Digital, 2 D/A Inputs, 8 Transistor Outputs	12	3 30kHz, 32-bit	2 0-10V, 0-20mA, 4-20mA 10-bit	—	8 pnp	7 0.5kHz	—	—	24VDC
SM35-J-RA22 SM43-J-RA22 SM70-J-RA22	12 Digital, 1 HSC/Shaft- encoder, 2 AI, 2 PT100/TC, 8 Relay, 2 AO	12	1 30kHz, 32-bit	2 0-10V, 0-20mA, 4-20mA 12/14-bit	2 PT100/TC	—	—	8	2 0-10V, 4-20mA, 12-bit	24VDC
SM35-J-TA22 SM43-J-TA22 SM70-J-TA22	12 Digital, 1 HSC/Shaft- encoder, 2 AI, 2 PT100/TC, 8 Transistor, 2 AO	12	1 30kHz, 32-bit	2 0-10V, 0-20mA, 4-20mA 12/14-bit	2 PT100/TC	8 pnp	5 0.5kHz	—	0-10V, 4-20mA, 12-bit ²	24VDC

¹ In some models certain inputs are adaptable via wiring and software settings, and can function as digital or analog.
 Adapting requires input pins. This reduces the number of digital inputs.
 Pin requirements: Each analog input requires 1 pin.
 Example: SM35-J-R20 offers 12 digital inputs. Implementing 2 analog inputs requires 2 pins, leaving 10 pins free.

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 When selecting NPN for the digital inputs, the 2 Analog inputs cannot be used.

JAZZ®

Features:

HMI

- Up to 60 user-designed screens
- Multi language

PLC

- I/O options include digital, analog, temperature and high speed
- Auto-tune PID, up to 4 independent loops (according to model*)

Communication

Built-in ports:

- 1 Mini USB for programming

Add-on ports:

- 1 Ethernet TCP/IP
- 1 RS232 / RS485

Protocols:

- PC access via MODBUS or OPC server
- Supports MODBUS protocol (according to model)

General Features:

- SMS via GSM
- 3G Modem support
- Remote access utilities

Accessories:

- Program Cloner module- Copy applications from PLC to PLC
- Keypad Slide kit- Customize the Jazz keypad to your application

*Up to 4 loops: models UA24 / UN20
1 loop: all other models 1

DIN-rail Power Supplies

UAP-24V24W	UAP-24V60W	UAP-24V96W
24W 24V 1A	60W 24V 2.5A	96W 24V 4A

GSM

GSM-KIT-17J-3G
KIT, MODEM GPRS, CINTERION, EHS6T

Jazz Add-on ports and Accessories

COM Port kit	Ethernet Communication Port	Program Cloner module	Keypad Slide kit
RS232/RS485 (isolated) Article No.: JZ-RS4	Article No.: MJ20-ET1 ¹	Article No.: MJ20-MEM1	Article No.: MJ20-JZ-SL1 ¹

¹ Not yet UL certified

An All-in-One unit as affordable as a "smart relay". Full-function PLC combined with a textual HMI and keypad, with up to 40 built-in I/Os.



Jazz®



I/O Options	
Total supported I/Os	40
Built-in	According to model (See Built-in I/Os table below)
I/O Expansion	-
Program	
Memory Operands	256 coils, 256 registers, 64 timers
Ladder Memory	48K
HMI Panel	
Touch screen	-
Cut Out Height x Width (mm)	117 x 89
Resolution	2 lines, 16 characters
Keys	16 keys, including 10 user-labeled keys
Environment	
Protection	NEMA4X/IP65 when panel mounted
Operating Temperature	32° to 122°F (0 to 50°C)
Standards	UL, CE, EAC
General	
Battery	10 years typical at 77°F (25°C), battery back-up for RTC and system data, including variable data
Clock	Real-time clock functions (date and time)

Jazz® models - Built-in I/O configurations

Article ⁴	Summary	Inputs ¹				Outputs				Operating Voltage
		Digital ²	HSC/Shaft-encoder ²	Analog	Temperature Measurement	Transistor ³	PWM/HSO ³	Relay	Analog	
JZ20-J-R10	6 Digital Inputs 4 Relay Outputs	6	2 10kHz, 16-bit	—	—	—	—	4	—	24VDC
JZ20-J-R16	6 Digital, 2 D/A, 2 Analog Inputs ¹ 6 Relay Outputs	8		2 0-10V 10 or 12-bit 2 0-20mA, 4-20mA 10 or 12-bit	—	—	—	6	—	24VDC
JZ20-J-R16HS	6 Digital, 3 HSC/Shaft-encoder, 2 A/D, 2 AI, 6 Relay outputs	8	3 10kHz, 16-bit	2 0-10V 10 or 12-bit 2 0-20mA, 4-20mA 10-bit	—	—	6	—	24VDC	
JZ20-J-R31	16 Digital, 2 D/A, 2 Analog Inputs ¹ 11 Relay Outputs	18	2 10kHz, 16-bit	2 0-10V 10 or 12-bit 2 0-20mA, 4-20mA 10-bit	—	—	11	—	24VDC	
JZ20-J-T10	6 Digital Inputs 4 Transistor Outputs	6		—	—	4 pnp	—	—	24VDC	
JZ20-J-T18	6 Digital, 2 D/A, 2 Analog Inputs ¹ 8 Transistor Outputs	8		2 0-10V 10-bit 2 0-20mA, 4-20mA 10-bit	—	8 pnp	—	—	24VDC	
JZ20-J-T20HS	6 Digital, 3 HSC/Shaft-encoder, 2 A/D, 2 AI, 10 Transistor outputs	8	3 10kHz, 16-bit	2 0-10V 10-bit	—	8 pnp 2 npn	2 32kHz	—	24VDC	
JZ20-J-T40	16 Digital, 2 D/A, 2 Analog Inputs ¹ 20 Transistor Outputs	18	2 10kHz, 16-bit	2 0-10V 10-bit 2 0-20mA, 4-20mA 10-bit	—	20 pnp	—	—	24VDC	
JZ20-J-UA24	9 Digital Inputs, 1 HSC, 2 A/D, 2 AI, 2 TC/PT100, 5 Relay Outputs, 2 Transistor Outputs, 2 AO	11		2 0-20mA 4-20mA 2 0-10 VDC	2 Thermocouple, PT100	2 pnp	2	5	2 +/-10V, 4 -20mA 12-bit	24VDC
JZ20-J-UN20	9 Digital, 2 D/A, 1 Analog 1 TC/PT100 Inputs ¹ 5 Relay 2 Transistor Outputs	11	1 5kHz, 16-bit	2 0-10V 10-bit 1 0-20mA, 4-20mA 10-bit	1 Thermocouple, PT100	2 pnp	2	5	—	24VDC

¹ In some models certain inputs are adaptable, and can function as either digital or analog. Adapting requires input pins. This reduces the number of digital inputs. Pin requirements: Each analog input requires 1 pin.

² Note that the high-speed inputs are included in the total number of digital inputs

³ Note that the high-speed outputs are included in the total number of npn/pnp digital outputs

⁴ To order a classic Jazz with a Bezel panel, omit the 'J' from the model number, ex. JZ20-R10

I/O Expansion Modules & Accessories- Vision Series

Expand your system with local or remote I/O expansion modules.

	Expansion Modules Article	Inputs					Outputs					Operating Voltage
		Digital ¹	HSC ²	Analog	Temperature Measurement	Weight Measurement	Transistor ⁶	PWM/HSO ⁶	Relay	Analog		
Digital	IO-DI8-T08	8 pnp/npn	1 5kHz 16-bit	—	—	—	8 pnp	—	—	—	24VDC ⁹	
	IO-DI8-R04	8 pnp/npn	1 5kHz 16-bit	—	—	—	—	4	—	24VDC ⁹		
	IO-DI8-R08	8 pnp/npn	1 5kHz 16-bit	—	—	—	—	8	—	24VDC ⁹		
	EX90-DI8-R08 ³	8 pnp	1 5kHz 16-bit	—	—	—	—	8	—	24VDC		
	IO-DI16	16 pnp/npn	1 5kHz 16-bit	—	—	—	—	—	—	24VDC ⁹		
	IO-T016	—	—	—	—	—	16 pnp	—	—	24VDC		
	IO-R08	—	—	—	—	—	—	8	—	24VDC ⁹		
	IO-R016	—	—	—	—	—	—	16	—	24VDC ⁹		
	IO-DI8ACH	8 AC	—	—	—	—	—	—	—	—	110/220 VAC	
Analog, Temperature and Weight/Strain Measurements	IO-AI4-A02	—	—	4 0-10V, 0-20mA, 4-20mA 12-bit	—	—	—	—	2 ±10V 12-bit+sign, 0-20mA, 4-20mA 12-bit	24VDC		
	IO-PT400	—	—	—	4 PT100/NI100/NI120	—	—	—	—	Not relevant		
	IO-PT4K	—	—	—	4 PT1000/NI1000	—	—	—	—	Not relevant		
	IO-A06X	—	—	—	—	—	—	—	6 (Isolated) 0-10V, 0-20mA, 4-20mA 12-bit	24VDC		
	IO-LC1	1 pnp	—	—	—	—	1 Loadcell / Strain gauge	2 pnp	—	—	24VDC	
	IO-LC3	1 pnp	—	—	—	—	3 Loadcell / Strain gauge	2 pnp	—	—	24VDC	
	IO-ATC8	—	—	8 Thermocouple, 0-10V, 0-20mA, 4-20mA 14-bit	—	—	—	—	—	—	Not relevant	
	IO-AI8	—	—	8 0-10V, 0-20mA, 4-20mA 14-bit	—	—	—	—	—	—	Not relevant	
XL Digital/ Analog	IO-D16A3-R016	16 pnp/npn	2 30kHz 16/32-bit ⁸	3 0-20mA, 4-20mA 10-bit	—	—	—	16	—	24VDC		
	IO-D16A3-T016	16 pnp/npn	1 30kHz 16/32-bit ⁸	3 0-20mA, 4-20mA 10-bit	—	—	15 pnp, 1 pnp/npn	1 pnp 0.5kHz nnp 50kHz	None	24VDC		
	EX-D16A3-R08 ⁷	16 pnp/npn	2 30kHz 16/32-bit ⁸	3 0-20mA, 4-20mA 10-bit	—	—	None	None	8	24VDC		
	EX-D16A3-T016 ⁷	16 pnp/npn	1 30kHz 16/32-bit ⁸	3 0-20mA, 4-20mA 10-bit	—	—	15 pnp 1 pnp/npn	1 pnp 0.5kHz nnp 50kHz	None	24VDC		
High-speed Remote I/O Module	EXF-RC15 ^{2,4,10}	9 pnp/npn	3 200kHz 32-bit	—	—	—	4 nnp	4 (up to 3 PTO)	2	24VDC		

I/O Expansion Module Adapters

I/O Expansion Module Adapters	Article	Description
	EX-A2X ¹	Local I/O module adapter, Galvanic isolation. Up to 8 modules may be connected to a single PLC ¹ . Supports both 12/24 VDC.
	EX-RC1 ^{1,4}	Remote I/O module adapter, via CANbus. Multiple adapters may be connected to a single PLC, with up to 8 modules to each adapter ¹ . Supports both 12/24 VDC.

¹ Number of supported I/Os & I/O modules varies according to module.
² The EXF-RC15 functions as a node in a Vision UniCAN network and connects to the Vision controller via CANbus and programmed in VisiLogic. The EXF-RC15 cannot be extended as regular I/O unit. High-speed inputs are configurable as either high-speed counter (HSC) or shaft-encoder.
³ The EX90 is housed in an open casing. Only one EX90 can be connected per PLC, as a single expansion module; Expansion adapter not required.
⁴ Supported by Samba, Vision and UniStream series.
⁵ The total number of digital inputs listed includes high-speed inputs. Example: the IO-D16A3-T016 offers a total of 16 pnp/npn inputs. You can configure 14 as a HSC and 15 as a Counter reset; this reduces the available number of digital inputs to 14.
⁶ The total number of digital outputs listed includes high-speed outputs. Example: the IO-D16A3-T016 offers a total of 16 transistor outputs. You can configure 1 to High-speed output, reducing the number of available digital outputs to 15.
⁷ Functions as local adapter. Can support up to 7 I/O modules.
⁸ 16-bit or 32-bit, depending on the PLC.
⁹ Also available as 12VDC – contact us for part number.
¹⁰ One HSC may be configured as a shaft encoder.

Snap-in I/O Modules

Compatible with Vision models: V560, V570, V700, V1040 and V1210.

Snap-in I/O Article	Inputs				Outputs				Operating Voltage
	Digital (isolated) ¹	HSC/Shaft-encoder ¹	Analog	Temperature Measurement	Transistor (isolated) ²	PWM/HSO ²	Relay	Analog	
V200-18-E1B	16 pnp/npn	2 10kHz 32-bit	3 0-10 V, 0-20mA, 4-20mA 10-bit	—	4 pnp/npn	2 pnp 0.5kHz nnp 50kHz	10	—	24VDC
V200-18-E2B	16 pnp/npn	2 10kHz 32-bit	2 0-10 V, 0-20mA, 4-20mA 10-bit	—	4 pnp/npn	2 pnp 0.5kHz nnp 50kHz	10	2 0-10 V, 0-20mA, 4-20mA 12-bit	24VDC
V200-18-E3XB	18 pnp/npn	2 10kHz 32-bit	4 (Isolated) Thermocouple, PT100, 0-10V, 0-20mA, 4-20mA 14-bit	—	2 pnp/npn	2 pnp 0.5kHz nnp 50kHz	15	4 (Isolated) 0-10 V, 4-20mA 12-bit	24VDC
V200-18-E4XB	18 pnp/npn	2 10kHz 32-bit	4 (Isolated) Thermocouple, PT100, 0-10V, 0-20mA, 4-20mA 14-bit	—	15 pnp 2 nnp/pnp	2 pnp 0.5kHz nnp 50kHz	—	4 (Isolated) 0-10 V, 4-20mA 12-bit	24VDC
V200-18-E5B	18 pnp/npn	2 10kHz 32-bit	3 0-10 V, 0-20mA, 4-20mA 10-bit	—	15 pnp 2 nnp/pnp	2 pnp 0.5kHz nnp 50kHz	—	—	24VDC
V200-18-E6B	18 pnp/npn	2 10kHz 32-bit	2 Thermocouple, PT100, 0-10V, 0-20mA, 4-20mA 14-bit 3 0-10V, 0-20mA, 4-20mA 10-bit	—	2 pnp/npn	2 pnp 0.5kHz nnp 50kHz	15	2 (Isolated) 0-10 V, 4-20mA 12-bit	24VDC
V200-18-E46B	18 pnp/npn	2 10kHz 32-bit	6 0-10 V, 0-20mA, 4-20mA 14-bit 3 0-10 V, 0-20mA, 4-20mA 10-bit	—	2 pnp/npn	2 pnp 0.5kHz nnp 100kHz	15	2 (Isolated) 0-10 V, 4-20mA 12-bit	24VDC
V200-18-E62B ³	30 pnp/npn	2 10kHz 32-bit	2 0-10 V, 0-20mA, 4-20mA 10-bit	—	28 pnp 2 nnp/pnp	2 pnp 0.5kHz nnp 100kHz	—	—	24VDC

¹ The total number of digital inputs listed includes high-speed inputs.
² The total number of digital outputs listed includes high-speed outputs.
³ Not yet UL certified

Vision & Samba COM Modules

Enhance Vision's communication capabilities

Model	Ethernet	RS232/RS485	Isolated RS232/RS485	CANbus	Profibus
SAMBA	V100-17-ET2	V100-17-RS4	V100-17-RS4X	V100-17-CAN	—
V130, V350, V430 ¹	V100-17-ET2, V100-S-ET2 ²	V100-17-RS4	V100-17-RS4X	V100-17-CAN, V100-S-CAN ⁵	V100-17-PB1
V560, V570, V1040, V1210 ²	V200-19-ET2	V200-19-RS4	V200-19-RS4-X	Built-in	—
V700 ⁴	Built-in	V100-17-RS4	V100-17-RS4X	V100-17-CAN	V100-17-PB1

¹ V130/V350/V430: Two ports may be added: 1 for Serial/Ethernet/Profibus and 1 for CANbus.
² V560/V570/V1040/V1210: 1 port may be added: Serial/Ethernet.
³ Extended temperature cards, operational temperature: -22°F to 140°F (-30°C to 60°C) - for V350-JS-TA24 only.
⁴ V700 is supplied with an Built-in Ethernet port. One port may be added: serial/Profibus, and CANbus.
⁵ Not yet UL certified

DIN-rail Power Supplies

UAP-24V24W	UAP-24V60W	UAP-24V96W
24W 24V 1A	60W 24V 2.5A	96W 24V 4A

GSM

GSM-KIT-17J-3G
KIT, MODEM GPRS, CINTERION, EHS6T

NEW!

Moving your Control Forward – Variable Frequency Drives

Use our VFDs as a stand-alone product or integrated with our PLC+HMI controllers.



VFD: Easy to Program. Simple to Use

- EMC built-in filters
- Variety of mounting options
- Temperature - extended operating range
- Modbus RTU fieldbus
- UL, TÜV-SÜD safety and CE certified
- Braking units - built-in
- Sensorless Vector and Torque control
- Heavy-duty overload capacity
- STO (Safe Torque Off)

Use as an All-in-One package

Program the VFD using the same programming software as our controllers: UniStream®, Vision™ and Samba™



VFD Specifications

		UMI-B1 EU	UMI-B1 UL	UMI-B5 UL
Power	Input Voltage	200-240VAC, Single Phase 380-440VAC, Three Phase	200-240VAC, Single Phase 200-240VAC, Three Phase 380-480VAC, Three Phase	200-240VAC, Three Phase 380-480VAC, Three Phase
	Input Frequency	50/60Hz		
	Supported Motors	Asynchronous Induction Motors, Three Phase Input		Asynchronous Induction Motors, Three Phase Input Permanent Magnet Synchronous Motors, Three Phase Input
	Output Frequency	0-400Hz		
	Overload Capacity	150%, 60 seconds 180%, 10 seconds 200%, 1 second		
Control	Control Method	SVPWM (Space Vector PWM) SVC (Sensorless Vector Control)		
	Control Setting	MODBUS, Analog, Digital, PID, Pulse		
	Communication	MODBUS RTU RS-485		
Input	Analog Inputs	Total 2: 1 input 0-10V, 0-20mA, 1 input 0-10V		Total 3: 2 inputs 0-10V, 0-20mA, 1 input 0-10V
	Digital Inputs	Total 5: 4 inputs 1kHz, 1 input 50kHz		Total 9: 8 inputs 1kHz, 1 input 50kHz
Output	Analog Outputs	Up to 2: 1 output 0-10V, 0-20mA ≤2.2kW/3HP, (2nd output available from >2.2kW/3HP)	2 outputs 0-10V, 0-20mA	
	Digital Outputs	1 output sink/source		Total 2: 1 output sink/source, 1 output 50kHz
	Relay Outputs	Up to 2: 1 Programmable Multi-functional output. 2nd output available from >2.2kW/3HP	Total 2 Programmable Multi-functional outputs	
Features	Dynamic Braking Unit	Built-in (≤37kW/50HP) Optional (>37kW/50HP)		Built-in (≤30kW/40HP) Optional (>30kW/40HP)
	EMC Filters	Built-In C3 (≥4kW/5HP), Comply with IEC/EN 61800-3 Optional C3 (<4kW/5HP), Comply with IEC/EN 61800-3		Built-In C3, Comply with IEC/EN 61800-3
		Optional C2, Comply with IEC/EN 61800-3		
General	Operating Temperature	(-10)°C/14°F – 50°C/122°F (de-rated by 1% for every 1°C/2°F above 40°C/104°F)		
	Altitude	2000m/6600 ft (de-rated by 1% for every additional 100m/330ft above 1000m/3300ft)		
	Enclosure Rating	IP20		
	Mounting Options	Wall and Rail (≤2.2kW/3HP) Wall and Flange (>2.2kW/3HP)		Wall, Flange
	Cooling	Air-cooling		
	Safe Torque Off	Yes		Not Available
	Compliance	CE, TÜV-SÜD Safety Mark		CE, UL and cUL

UMI-B1 Series - ST0



Article Number	Input Voltage	Rated Output Power		Rated Input Current (A)	Rated Output Current (A)	Dimensions (W x H x D mm)			Safety Class
		kW	HP						
UMI-0004BE-B1	Single phase 200-240V	0.4	0.5	6.5	2.5	80	160	124	Class SIL2 PLd CAT.3
UMI-0007BE-B1		0.75	1	9.3	4.2	80	160	124	
UMI-0015BE-B1		1.5	2	15.7	7.5	80	185	141	
UMI-0022BE-B1		2.2	3	24	10	80	185	141	
UMI-0007EE-B1		0.75	1	3.4	2.5	80	185	141	
UMI-0015EE-B1	1.5	2	5	4.2	80	185	141		
UMI-0022EE-B1	2.2	3	5.8	5.5	80	185	141		
UMI-0040EE-B1	4	5	13.5	9.5	146	256	167		
UMI-0055EE-B1	5.5	7.5	19.5	14	146	256	167		
UMI-0075EE-B1	7.5	10	25	18.5	170	320	197		
UMI-0110EE-B1	11	15	32	25	170	320	197		
UMI-0150EE-B1	15	20	40	32	170	320	197		
UMI-0185EE-B1	18.5	25	47	38	200	341	185		
UMI-0220EE-B1	22	30	51	45	200	341	185		
UMI-0300EE-B1	30	40	70	60	250	400	202		
UMI-0370EE-B1	37	50	80	75	250	400	202		
UMI-0450EE-B1	45	60	98	92	282	560	238		
UMI-0550EE-B1	55	75	128	115	282	560	238		
UMI-0750EE-B1	75	100	139	150	282	560	238		
UMI-0900EE-B1	90	120	168	180	338	554	330		
UMI-1100EE-B1	110	150	201	215	338	554	330		

UMI-B1 Series - UL



Article Number	Input Voltage	Rated Output Power		Rated Input Current (A)	Rated Output Current (A)	Dimensions (W x H x D mm)		
		kW	HP					
UMI-0004BU-B1	Single phase 200-240V	0.4	0.5	6.5	2.5	80	160	124
UMI-0007BU-B1		0.75	1	9.3	4.2	80	160	124
UMI-0015BU-B1		1.5	2	15.7	7.5	80	185	141
UMI-0022BU-B1		2.2	3	20	10	80	185	141
UMI-0004CU-B1	Three phase 200-240V	0.4	0.5	3.7	2.5	80	185	141
UMI-0007CU-B1		0.75	1	5	4.2	80	185	141
UMI-0007EU-B1	Three phase 380-480V	0.75	1	3.4	2.5	80	185	141
UMI-0015EU-B1		1.5	2	5	4.2	80	185	141
UMI-0022EU-B1		2.2	3	5.8	5.5	80	185	141

UMI-B5 Series - UL

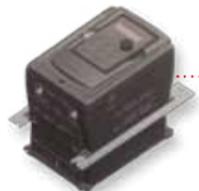


Article Number	Input Voltage	Rated Output Power		Rated Input Current (A)	Rated Output Current (A)	Dimensions (W x H x D mm)		
		kW	HP					
UMI-0007CU-B5	Three phase 200-240V	0.75	1	5	4.5	126	193	175
UMI-0015CU-B5		1.5	2	7.7	7	146	263	181
UMI-0022CU-B5		2.2	3	11	10	146	263	181
UMI-0040CU-B5		4	5	17	16	170	332	216
UMI-0055CU-B5		5.5	7.5	21	20	170	332	216
UMI-0075CU-B5		7.5	10	31	30	230	342	216
UMI-0110CU-B5		11	15	43	42	255	407	245
UMI-0150CU-B5		15	20	56	55	255	407	245
UMI-0185CU-B5		18.5	25	71	70	270	555	325
UMI-0220CU-B5		22	30	81	80	270	555	325
UMI-0300CU-B5		30	40	112	110	270	555	325
UMI-0370CU-B5		37	50	132	130	325	680	365
UMI-0450CU-B5		45	60	163	160	325	680	365
UMI-0550CU-B5		55	75	200	200	325	680	365
UMI-0015EU-B5		Three phase 380-480V	1.5	2	5	3.7	126	193
UMI-0022EU-B5	2.2		3	5.8	5	126	193	175
UMI-0040EU-B5	4		5	13.5	9.5	146	263	181
UMI-0055EU-B5	5.5		7.5	19.5	14	146	263	181
UMI-0075EU-B5	7.5		10	25	18.5	170	332	216
UMI-0110EU-B5	11		15	32	25	170	332	216
UMI-0150EU-B5	15		20	40	32	230	342	216
UMI-0185EU-B5	18.5		25	47	38	230	342	216
UMI-0220EU-B5	22		30	56	45	255	407	245
UMI-0300EU-B5	30		40	70	60	255	407	245
UMI-0370EU-B5	37		50	80	75	270	555	325
UMI-0450EU-B5	45		60	94	92	270	555	325
UMI-0550EU-B5	55		75	128	115	270	555	325
UMI-0750EU-B5	75		100	160	150	325	680	365
UMI-0900EU-B5	90		120	190	180	325	680	365
UMI-1100EU-B5	110	150	225	215	325	680	365	

Optional Parts



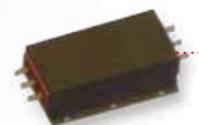
External Keypads



Flange Mounting Plates



Braking Resistors



C3 Input Filters
C2 Filters

Product Designation Key

UMI - 0022 E U - B1
① ② ③ ④ ⑤

No.	Key	Description
①	Product Line	Unitronics Motion Inverters
②	Power Range	0004:400W/0.5HP 0022:2.2kW/3HP
③	Power Rating	B: 1PH 200V-240V C: 3PH 200V-240V E: 3PH 380V-440V/480V
④	Certification	U - UL Certified E - TÜV-SÜD Certified
⑤	Product series	B1 / B5

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Dan Murphy, Owner of Marathon Bottling and Automation

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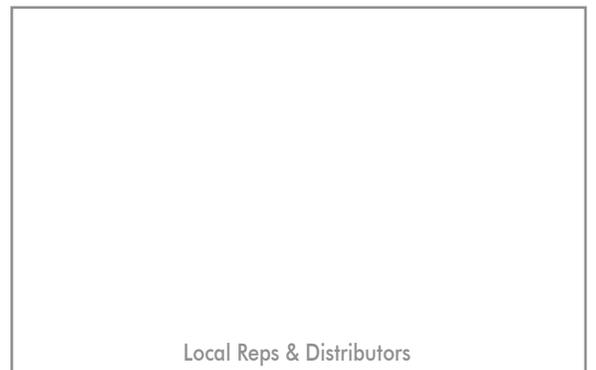
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