

# One Integrated Solution for Control & Automation

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

Outstanding Support

## **UNISTREAM® PLC**



# **About Unitronics**

Unitronics designs, manufactures, and markets advanced control and automation solutions. Our extensive offering includes a complete line of PLCs, 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 controllers range from micro-PLC + HMI units for simple machine control, to complex controllers with advanced functions, a variety of onboard IOs 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 over 1 million 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:**

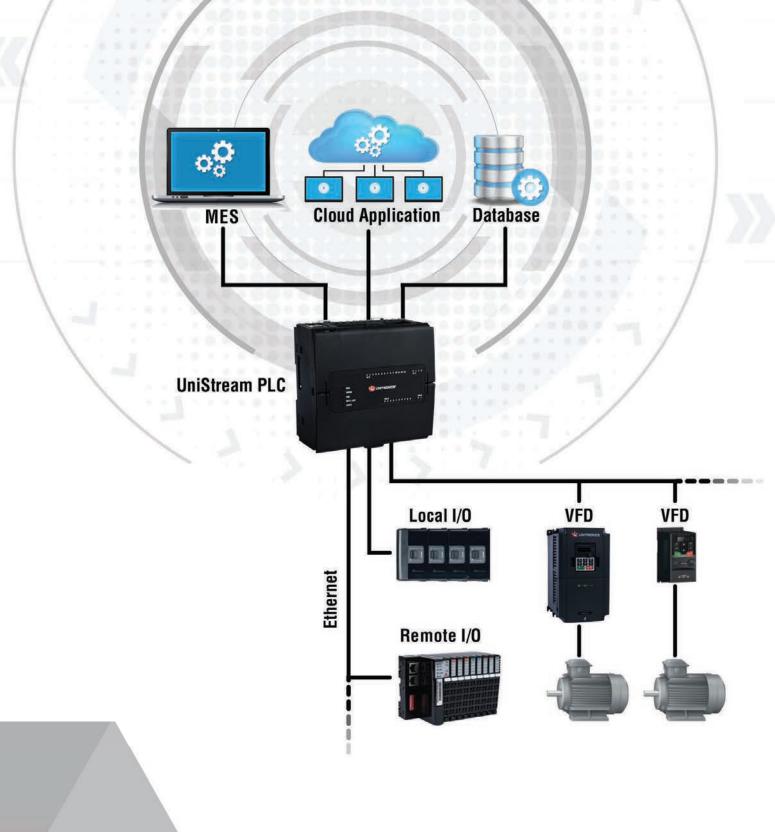
- Full Product Range: PLCs, PLC + HMI controllers, I/Os, and VFDs to meet all application needs.
   All software and utilities are provided at no additional charge
- All-in-One Software: Configure and program PLC, HMI, VFD, and all other components in one easy environment
- Industry 4.0: SNMP, FTP, e-mail, 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: Products tailored-made according to specifications



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This catalog provides a general overview of Unitronics products. Before you place an order, please check the complete technical specifications for each product, located in the www.unitronics-cannabis.com.

# **One Integrated Solution for**



# **Control and Automation**

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#### **Broad Range of PLCs and HMI Panels**

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

#### **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 VNC



## Powerful, Robust Controller with a New Concept: Virtual HMI

**UNISTREAM**° PLC provides you with advanced communication support –

including Industry 4.0 - built-in I/Os, expandable to over 2,000 I/Os and enhance your ability to master the complex, demanding control tasks required by your machine or process application.

- Two technologies in one product -



### **Virtual HMI**

- Build your PLC and HMI applications using the same programming software
- Download your program applications to the PLC
- The UniStream PLC simultaneously stores & runs both the program logic and HMI application
- Remotely operate your machine or process via any mobile phone, PC, or any other display device

## Hardware

6

- High-performance robust PLC matches vast application requirements
- Built-in I/O, expand to more than 2,000 I/Os
- Range of I/O modules: digital, analog, high-speed and temperature
- Advanced support for Industry 4.0



## UniLogic®: Award-winning software - Cuts development time by 50%!

**UniLogic**<sup>®</sup> offers a fast, easy solution to OEMs and System Integrators—you program all tasks using the same software environment. Build the PLC application, design HMI screens, create Web pages in multiple languages, and save it all in a Library to re-use in other projects.

## **UNISTREAM® PLC** Features:

## PLC

- I/O options include digital, analog, high speed, and temperature
- Expand locally: up to 2048 I/Os<sup>1</sup>
- Expand remotely: via UniStream Remote I/O
- Auto-tune PID, up to 64 independent loops<sup>2</sup>
- Recipes & data logging via data tables & sampling<sup>1</sup>
- MicroSD card log, backup, clone & more<sup>1</sup>
- Function Blocks & Structs

## Communication

#### **Built-in ports:**

- 2 Ethernet TCP/IP
- 1 USB host
- 1 Mini USB for programming<sup>1</sup>

#### Add-on ports:<sup>3</sup>

- 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<sup>4</sup>
- Web Server<sup>4</sup>
- E-mail & SMS
- Remote access via VNC
- FTP server & client<sup>1</sup>
- GPRS

### Virtual HMI

- Full HMI functionality
- Support different resolution type
- Includes Drag & Drop graphic library
- Multi-language display
- Built-in Alarm Screens
- PDF viewer<sup>1</sup>
- Multi-level password protection easy and fast

### Supports UniStream® Displays & HMI Panels:

#### **UniStream Display:**

- Size: 5" (USL-050-B05)
- Size: 7" (USL-070-B05)

#### **UniStream HMI Panels:**

- Size: 10.4" (USP-104-B10)
- Size: 15.6" (USP-156-B10)



UniStream Display



- <sup>1</sup> Pro (B10) and Standard (B5) only.
- $^{2}$  Basic (B3) supports up to 2 independent PID loops
- <sup>3</sup> Up to two serial modules for B10/B5 and one for B3

<sup>4</sup> Pro (B10) only

## **UNISTREAM® PLC I/O Configurations**

Article		Inputs					Outputs			
Number	Summary	Digital (Isolated)	HSC/Shaft- encoder <sup>1</sup>	Analog	Temperature inputs, RTD/TC	Transistor <sup>2</sup> (Isolated)	PWM <sup>2</sup>	Relay	Analog	Voltage
USC-B5-B1 USC-B10-B1	No built-in I/Os	-	-	-	-	-	-	-	-	12/24VDC
USC-B5-TR22 USC-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
USC-B5-T24 USC-B10-T24	10 Digital Inputs, 2 Analog Inputs, 12 Transistor Outputs, pnp, including 2 PWM Outputs	10 Sink/ Source	-	2 0-10V, 0-20mA, 4-20mA 12-bit	-	12 Source (pnp)	2 3kHz	-	-	24VDC
USC-B5-RA28 USC-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
USC-B5-TA30 USC-B10-TA30	14 Digita Inputs, including 2 HSC, 2 Analog Inputs, 2 Temperature Inputs, 10 Transistor outputs, pnp, 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
USC-B5-R38 USC-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
USC-B5-T42 USC-B10-T42	24 Digital Inputs, including 4 HSC, 2 Analog Inputs, 16 Transistor Outputs, pnp, 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
USC-B3-R20	10 Digital Inputs, 2 Analog Inputs, 8 Relay Outputs	10 Sink/ Source	-	2 0-10V, 0-20mA, 4-20mA 12-bit	-	-	-	8	-	24VDC
USC-B3-T20	10 Digital inputs, 2 Analog Inputs, 8 Transistor Outputs, pnp, including 2 PWM Outputs	10 Sink/ Source	-	2 0-10V, 0-20mA, 4-20mA 12-bit	-	8 Source (pnp)	2 3kHz	-	-	24VDC

<sup>1</sup> Note that the high-speed inputs are included in the total number of digital inputs.

<sup>2</sup> Note that the PWM outputs are included in the total number of transistor outputs.

# Expand Locally via Uni-I/O<sup>™</sup> Expand up to 2048 I/O via Uni-I/O modules.

				Inputs		Outputs			
	Article Number	Digital (Isolated)	HSC/Shaft- encoder <sup>4</sup>	Analog	Temperature Measurement	Transistor⁵ (Isolated)	PWM/ HSO <sup>5</sup>	Relay	Analog
	UID-1600	<b>16</b> Sink/Source						_	
	UID-0808T	<b>8</b> Sink/Source	_	_	_	<b>8</b> Source(pnp)	_	_	—
	UID-W1616T <sup>3</sup>	<b>16</b> Sink/Source		_	_	<b>16</b> Source(pnp)	_	_	_
Digital	UID-0808THS1	<b>8</b> Sink/Source	<b>2</b> 250kHz 32-bit			<b>8</b> Source(pnp)	<b>2</b> <sup>2</sup> 250kHz <b>2</b> 3kHz	_	_
	UID-0016T	_	_	_	_	<b>16</b> Source(pnp)	_	_	—
	UID-0808R	<b>8</b> Sink/Source		_	_	_	_	8	—
	UID-W1616R <sup>3</sup>	<b>16</b> Sink/Source		_	_	_	_	16	_
	UID-0016R	_				_	_	16	
	UIA-0006				_				6 (Isolated) 0-10V 14-bit, ±10V 13-bit+sign, 0-20mA, 4-20mA 13-bi
	UIA-0402N			<b>4</b> 0-10V, 0-20mA, 4-20mA 13-bit	_				<b>2</b> 0-10V 14-bit, ±10V 13-bit+sign, 0-20mA, 4-20mA 13-bi
Analog and Temperature	UIA-0800N	_		<b>8</b> 0-10V, 0-20mA, 4-20mA 13-bit	_	_		_	—
NE	w! UIA-0800NH	_		<b>8</b> 0-20mA, 4-20mA With HART communication	_	_	_	_	—
	UIS-04PTN	—			<b>4</b> PT100/NI100/NI120	—	_	_	—
	UIS-04PTKN	_		_	<b>4</b> PT1000/NI1000/NI1200	_	_	_	_
	UIS-08TC				<b>8</b> (Isolated) Thermocouple <sup>7</sup>	_		_	
Digital/	UIS-WCB1 <sup>1,3</sup>	<b>10</b> Sink/Source	<b>2</b> 10kHz 32bit	<b>2</b> (Isolated) 0-10V, 0-20mA, 4-20mA 14-bit	<b>2</b> (Isolated) Thermocouple, PT100/NI100/NI120	2 <sup>6</sup> Sink (npn)	<b>2</b> 250kHz	8	<b>2</b> 0-10V 14-bit, ±10V 13-bit+sign, 0-20mA, 4-20mA 13-b
Analog	UIS-WCB2 <sup>1,3</sup>	<b>10</b> Sink/Source	<b>2</b> 10kHz 32bit	<b>2</b> (Isolated) 0-10V, 0-20mA, 4-20mA 14-bit	<b>2</b> (Isolated) Thermocouple, PT100/NI100/NI120	8 Source (pnp) 2 <sup>6</sup> Sink(npn)	2 250kHz (Sink outputs only)		<b>2</b> 0-10V 14-bit, ±10V 13-bit+sign, 0-20mA, 4-20mA 13-b

<sup>1</sup> This module utilizes two high speed blocks that can each be assigned either to the inputs or to the outputs.

 $^{\rm Z}\,$  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).

<sup>3</sup> Width: 1 'wide' I/O module = 1.5 'slim' I/O modules Note that the high-speed inputs are included in the total number of digital inputs. <sup>5</sup> Note that the high-speed outputs are included in the total number of digital outputs.

<sup>6</sup> Not isolated <sup>7</sup> Channel to channel isolated

CE cULus

#### **Local Expansion Adapters**

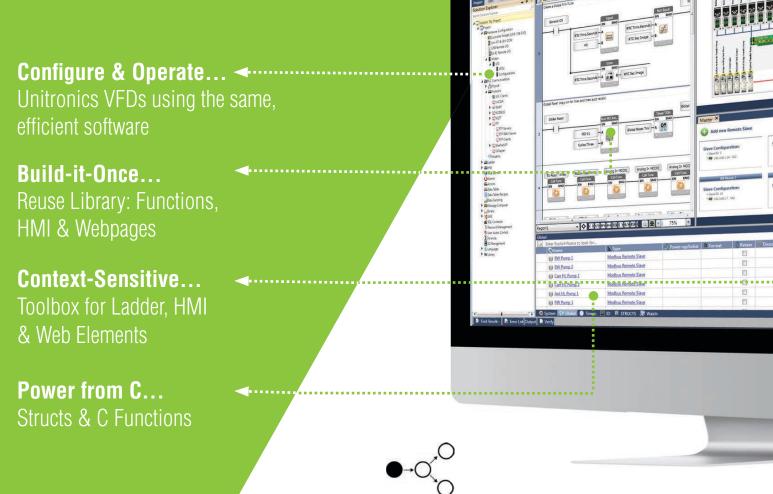
UAG-XK125	Short Range Kit, 125 cm
UAG-XKP125	Short Range + embedded Power Supply Kit, 125 cm
UAG-XK300	Short Range Kit, 300 cm
UAG-XKP300	Short Range Kit + embedded Power Supply, 300 cm
UAG-XKPLXXXX	Long Range + embedded Power Supply, lengths: 600, 1200, 1500, 2000, 3000cm

#### Uni-COM<sup>™</sup> Communication Modules<sup>1</sup>

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

## **UniLogic<sup>®</sup>-UniStream<sup>®</sup>** All-in-One Programming Software

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





#### Structs - Tag Database on Steroids

MOTT

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.

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.

#### 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...

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#### 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 HMTL 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.



#### Virtual HMI: Design HMI application & screens View via Mobile, PC, Remote Display Device

UniLogic's extensive free graphics library and HMI widgets enable you to be a graphic artist. The simple HMI editor supports layers, image transparency, overlap, and rotation. The Toolbox offers drag & drop widgets, Data Tables, complex Trend graphs and gauges for the display of run-time values, and more.

Design, download, and view on any display that supports VNC.



#### 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.

## Remote I/O

Article Number	Description	Connector Type
·	Adapter	<u>`</u>
URB-TCP	UniStream Remote IO Ethernet Adapter	10 RTB
	Digital Inputs	
URD-0800	8 Digital Inputs (Sink / Source), 24VDC	10 RTB
URD-1600-8	16 Digital Inputs (Sink / Source), 24VDC	18 RTB
URD-3200-4	32 Digital Inputs (Sink / Source), 24VDC	40 PIN IDC
URD-0400B	4 Digital Inputs, 120VAC	10 RTB
URD-0400C	4 Digital Inputs, 240VAC	10 RTB
	Encoder / High Speed Counters	
URD-0200E	2 High Speed Counters / Encoder Inputs, 24VDC	10 RTB
URD-0200D	2 High Speed Counters / Encoder Inputs, 5VDC	10 RTB
	Digital Outputs	
URD-0008CH	8 Digital Outputs (Source), 24VDC/0.5A	10 RTB
URD-0008CI	8 Digital Outputs (Source), 24VDC/2A	10 RTB
URD-0016CG-8	16 Digital Outputs (Source), 24VDC/0.3A	18 RTB
URD-0032CG-4	32 Digital Outputs (Source), 24VDC/0.3A	40 PIN IDC
URD-0008NH	8 Digital Outputs (Sink), 24VDC/0.5A	10 RTB
URD-0008NI	8 Digital Outputs (Sink), 24VDC/2A	10 RTB
URD-0016NG-8	16 Digital Outputs (Sink), 24VDC/0.3A	18 RTB
URD-0032NG-4	32 Digital Outputs (Sink), 24VDC/0.3A	40 PIN IDC
	Relay	
URD-0004RH	4 Relay, 2A	10 RTB
URD-0004SK	4 Solid State Relay, 240VAC/DC, 0.5A	10 RTB
URD-0004SM	4 Solid State Relay, 110VAC/DC, 1A	10 RTB
URD-0004SN	4 Solid State Relay, 24VAC/DC, 2A	10 RTB
	Analog Inputs 12 bit	
URA-04000	4 Analog Current Inputs 12bit	10 RTB
URA-08000	8 Analog Current Inputs 12bit	10 RTB
URA-16000-8	16 Analog Current Inputs 12bit	18 RTB
URA-0400P	4 Analog Voltage Inputs 12bit	10 RTB
URA-0800P	8 Analog Voltage Inputs 12bit	10 RTB
URA-1600P-8	16 Analog Voltage Inputs 12bit	18 RTB

- Ethernet based
- Up to 63 I/O modules per adapter
- Slim modules only 12mm
- 16-bit Analog Resolution
- Operating temperature: -40°C to 70°C
- Broad range of digital and analog modules





Article Number	Description	Connector Type
	Analog Inputs 16 bit	
URA-0400T	4 Analog Current Inputs 16bit	10 RTB
URA-1600T-8	16 Analog Current Inputs 16bit	18 RTB
URA-0400U	4 Analog Voltage Inputs 16bit	10 RTB
URA-1600U-8	16 Analog Voltage Inputs 16bit	18 RTB
	Analog Outputs 12 bit	
URA-0004W	4 Analog Current Outputs 12bit	10 RTB
URA-0008W	8 Analog Current Outputs 12bit	10 RTB
URA-0004X	4 Analog Voltage Outputs 12bit	10 RTB
URA-0008X	8 Analog Voltage Outputs 12bit	10 RTB
URA-0016X-8	16 Analog Voltage Outputs 12bit	18 RTB
	Analog Outputs 16 bit	
URA-0004Y	4 Analog Current Outputs 16bit	10 RTB
URA-0004Z	4 Analog Voltage Outputs 16bit	10 RTB
URA-0016Z-8	16 Analog Voltage Outputs 16bit	18 RTB
	Temperature	
URS-04RT	4 RTD / Resistance	10 RTB
URS-04TC	4 Thermocouple / mV	10 RTB
URS-08RT-2	8 RTD / Resistance	20 PIN IDC
URS-08TC-2	8 Thermocouple / mV	20 PIN IDC
	Power	
URP-PS24V	Adapter Additional System Power Expension, 1A	10 RTB
URP-C0V0V	8 0VDC Potential Distribution	10 RTB
URP-C24V24V	8 24VDC Potential Distribution	10 RTB
URP-C0V24V	4 24VDC, 4 0VDC Potential Distribution	10 RTB
URP-PDIST	External Universal Power Distribution	10 RTB
URP-SHIELD	External Universal Shield Distribution	10 RTB
	Spare Parts	
URB-END	Adapter End Module	
URO-0105	10 Removable Terminal Block For I/O	10 RTB
UR0-0106	18 Removable Terminal Block For I/O	18 RTB
UR0-0101	10 Removable Terminal Block For Potential Distribution	10 RTB
UR0-0102	10 Removable Terminal Block For External Power	10 RTB





## **Variable Frequency Drives**

# Use as a stand-alone product or integrated with Unitronics controllers



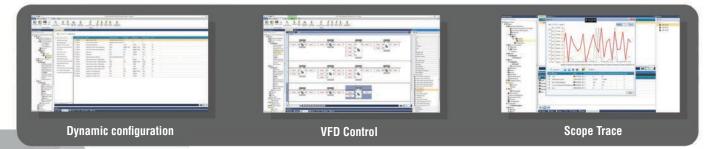
### VFD: Easy to Program. Simple to Use.

- 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:



## **VFD Specifications**



		UMI-B1 EU	UMI-B1 UL	UMI-B5 UL		
	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			
Power	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	·		
			150%, 60 seconds			
	Overload Capacity		180%, 10 seconds			
			200%, 1 second			
	Control Method		SVPWM (Space Vector PWN SVC (Sensorless Vector Contr			
Control	Control Setting		MODBUS, Analog, Digital, PID, I	Pulse		
	Communication					
Input	Analog Inputs	Total 2: 1 input 1 input	Total 3: 2 inputs 0-10V, 0-20mA, 1 input 0-10V			
mput	Digital Inputs	Total 5: 4 in 1 input		Total 9: 8 inputs 1kHz, 1 input 50kHz		
	Analog Outputs	Up to 2: 1 output 0-10V, 0-20mA ≤2.2kW/3HP, (2nd output available from >2.2kW/3HP)	uts 0-10V, 0-20mA			
Output	Digital Outputs	1 output s	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	ble Multi-functional outputs			
	Dynamic Braking Unit	Built-in (≤3	7kW/50HP)	Built-in (≤30kW/40HP)		
		Optional (>3	,	Optional (>30kW/40HP)		
		Built-In C3 (≥4kW/5HP), Co		Built-In C3, Comply with IEC/EN		
Features		Optional C3 (<4kW/5HP), Co	61800-3			
	EMC Filters	Optional C2, Comply with IEC/EN 61800-3				
	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-rate	d by 1% for every additional 100r	n/330ft_above_1000m/3300ft)		
	Enclosure Rating		IP20			
General	Mounting Options	Wall and Rail ( Wall and Flange		Wall, Flange		
	Cooling		Air-cooling	1		
	Safe Torque Off	ν	No	t Available		
	Compliance	CE, TÜV-SÜD Safety Mark	CE,	UL and cUL		

## **VFD Models**

UMI-B1 Series - UL

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

## c@Lus ⊂€

Article Number	Input Voltage	Rated Ou	tput Power	Rated Input Current (A)	Rated Output Current (A)	Dimensions (W x H x D mm)			
		kW	HP	(A)	(A)	(			
UMI-0007CU-B5		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	Three phase	11	15	43	42	255	407	245	
UMI-0150CU-B5	200-240V	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		1.5	2	5	3.7	126	193	175	
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	Three phase	18.5	25	47	38	230	342	216	
UMI-0220EU-B5	380-480V	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	

#### UMI-B1 Series - STO

Article Number	Input Voltage	1		Rated Input Current (A)	Rated Output Current (A)	Dimensions (W x H x D mm)			Safety Class
		kW	HP						
UMI-0004BE-B1		0.4	0.5	6.5	2.5	80	160	124	
UMI-0007BE-B1	Single phase	0.75	1	9.3	4.2	80	160	124	Class SIL2 PLd
UMI-0015BE-B1	200-240V	1.5	2	15.7	7.5	80	185	141	CAT.3
UMI-0022BE-B1		2.2	3	24	10	80	185	141	
UMI-0007EE-B1		0.75	1	3.4	2.5	80	185	141	Class
UMI-0015EE-B1		1.5	2	5	4.2	80	185	141	SIL2 PLd
UMI-0022EE-B1		2.2	3	5.8	5.5	80	185	141	CAT.3
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	Three	15	20	40	32	170	320	197	
UMI-0185EE-B1	phase	18.5	25	47	38	200	341	185	
UMI-0220EE-B1	380-440V	22	30	51	45	200	341	185	Class SIL3 PLe
UMI-0300EE-B1		30	40	70	60	250	400	202	CAT.3
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	

## **Optional Parts**



## Product Designation Key

UMI -	0022	Ε	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

CE

## Fast. Easy. Cost-effective

Unitronics' integrated solution for control & automation offers the best of two worlds: broad choice and flexibility in choosing solution components together with the simplicity and time-savings of an all-inclusive, single-vendor solution.

## "

Working with the Unitronics combined PLC and HMI make other systems feel old fashioned and obsolete. The support from Unitronics, from our local supplier, to email support, to help ideas on the forum, has been absolutely fantastic.

Justin Butler, Energy Plant Solutions

## After programming several other brands of PLCs, Unitronics' software is by far the most intuitive and easily understood while providing significant functionality and quality.

Dan Murphy, Owner of Marathon Bottling and Automation

## "

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Jeferson Franco, an Engineer at AI7 Automation Ltda.

 Complete range of PLC's

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