



One Integrated Solution for Control & Automation

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

Outstanding Support

UNI**STREAM**® 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 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:** 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, Dacom via CANopen, CAN Layer2, MODBUS, EtherNet/IP 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



| | | |
|----------------------------------|--|----|
| | One Integrated Solution for Control and Automation | 4 |
| <hr/> | | |
| UniStream® Series | UniStream PLC Series | 6 |
| | UniStream PLC I/O Configurations | 8 |
| | Local I/O Modules..... | 9 |
| | UniLogic® All-in-One Software..... | 10 |
| | Remote I/O Modules via Ethernet..... | 12 |
| <hr/> | | |
| Variable Frequency Drives | Variable Frequency Drives (VFDs)..... | 14 |
| | Specification..... | 15 |
| | VFD Models..... | 16 |
| | Drive Dimensions..... | 18 |

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 Unitronics website.

One Integrated Solution for



UniStream PLC



Control and Automation

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 provide you with advanced communication support – including Industry 4.0 - built-in I/Os, expandable to over 2,000 I/Os expansions 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

- 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® 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.

Available in three series: Pro (B10), Standard (B5), and Basic (B3)

UNISTREAM[®] PLC

Features:

PLC

- I/O options include digital, analog, high speed, and temperature
- Expand locally: up to 2048 I/Os¹
- Expand remotely: via UniStream Remote I/O
- Auto-tune PID, up to 64 independent loops²
- Recipes & data logging via data tables & sampling¹
- MicroSD card - log, backup, clone & more¹
- Function Blocks & Structs

Communication

Built-in ports:

- 2 Ethernet TCP/IP
- 1 USB host
- 1 Mini USB for programming¹

Add-on ports:³

- 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 Client⁴
- Web Server⁴
- E-mail & SMS
- Remote access via VNC
- FTP server & client¹
- GPRS

Virtual HMI

- Full HMI functionality
- Support different resolution type
- Includes Drag & Drop graphic library
- Multi-language display
- Built-in Alarm Screens
- PDF viewer¹
- 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



¹ Pro (B10) and Standard (B5) only.

² Basic (B3) supports up to 2 independent PID loops

³ Up to two serial modules for B10/B5 and one for B3

⁴ Pro (B10) only

UNISTREAM® PLC I/O Configurations

| Article Number | Summary | Inputs | | | | Outputs | | | | Operating Voltage |
|-------------------------------------|--|--------------------|--------------------------------|---|--|------------------------------------|------------------|-------|--|-------------------|
| | | Digital (Isolated) | HSC/Shaft-encoder ¹ | Analog | Temperature inputs, RTD/TC | Transistor ² (Isolated) | PWM ² | Relay | Analog | |
| 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 Digital 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 |

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™

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 | — |
| | UID-0016R | — | — | — | — | — | — | 16 | — |
| Analog and Temperature | 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 | — | — | — | — | — |
| | UIA-0800NH | — | — | 8 0-20mA, 4-20mA With HART communication | — | — | — | — | — |
| | UIS-04PTN | — | — | — | 4 PT100/NI100/NI120 | — | — | — | — |
| | UIS-04PTKN | — | — | — | 4 PT1000/NI1000/NI1200 | — | — | — | — |
| | UIS-08TC | — | — | — | 8 (Isolated) Thermocouple ⁷ | — | — | — | — |
| Digital/ Analog | 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 ⁶ 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 ⁶ 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

⁷ Channel to channel isolated

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™ Communication Modules¹

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

¹ Up to 2 serial modules and 1 CANbus module. Basic (B3) version support 1 serial module.

UniLogic® - UniStream®

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.

Configure & Operate...

Unitronics VFDs using the same, efficient software

Build-it-Once...

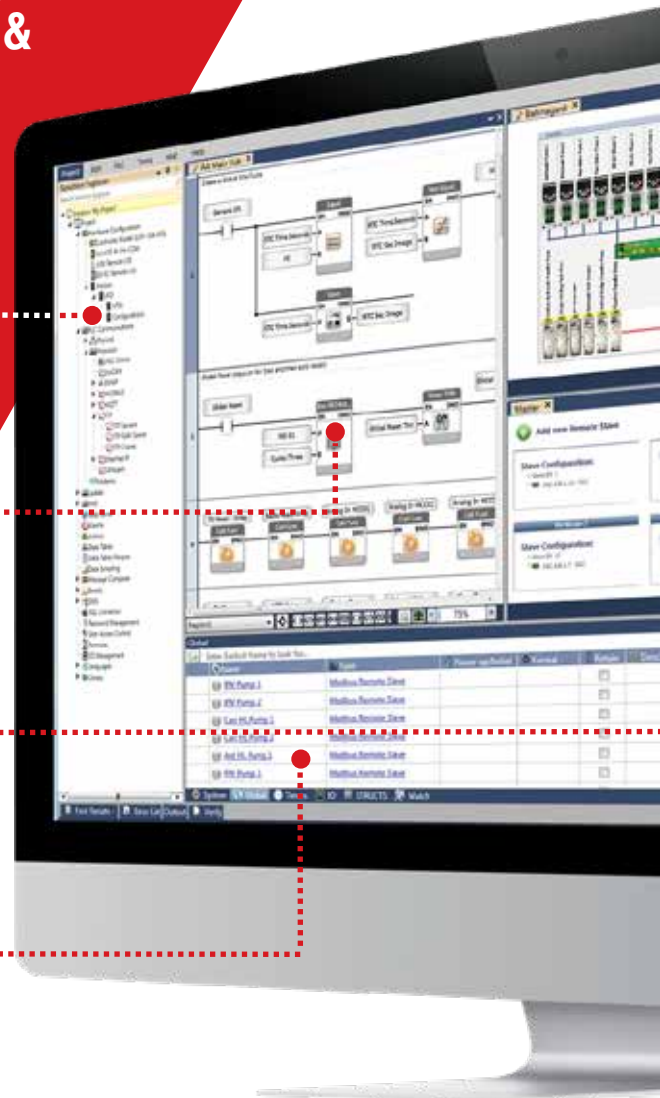
Reuse Library: Functions, HMI & Webpages

Context-Sensitive...

Toolbox for Ladder, HMI & Web Elements

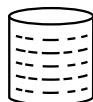
Power from C...

Structs & C Functions



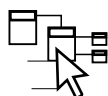
MQTT

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.

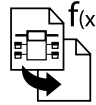
Create UDFBs (User Defined Function Blocks) - self-contained functions for tasks such as oven control, motor control, level control, etc...



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.



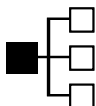
Languages - from Italian to Chinese at the Touch of a Button

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.



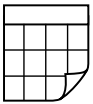
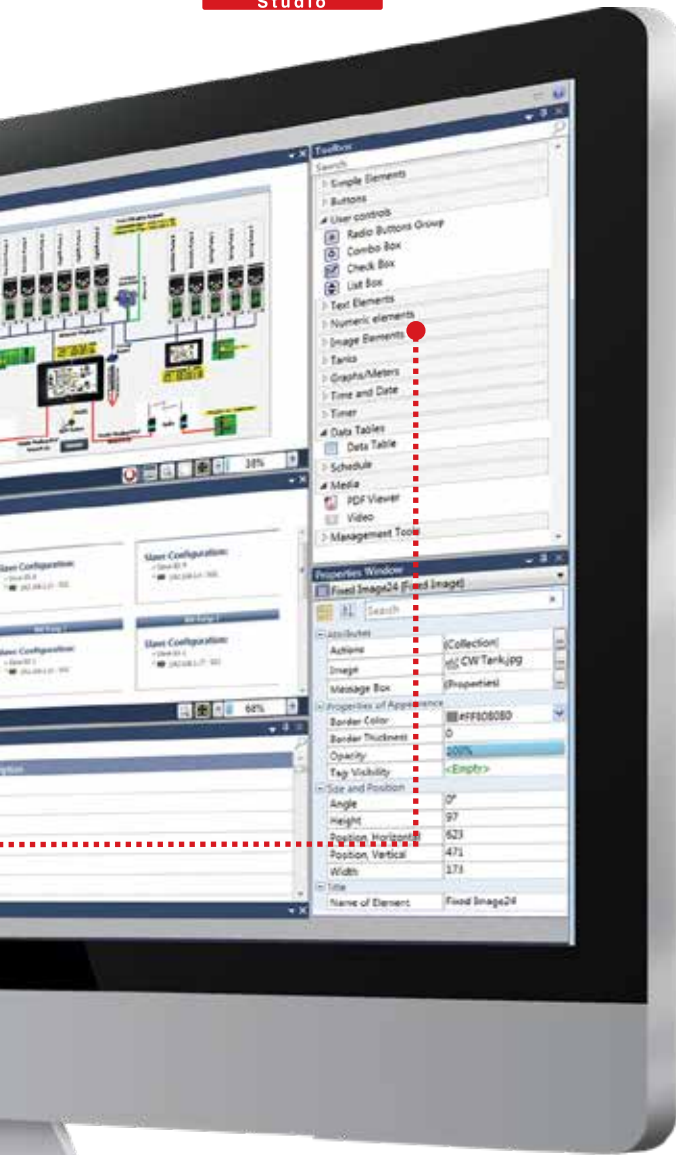
Built-in Alarms - Easily Boost Application Safety

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.



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.

Remote I/O Modules via Ethernet for UniStream® series: Modular & Built-in

Remote I/O Adapter



- 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

| Article Number | Description |
|----------------|---|
| URB-TCP | UniStream Remote IO Adapter, 63 Modules |
| URB-TCP2 | UniStream Remote IO Adapter, 6 Modules |
| URB-EC1 | Unistream EtherCAT Remote IO adaptor 16 Modules |

Input Modules

| Article | Description | Inputs | |
|-------------|--|---------|--------|
| | | Digital | Analog |
| URD-0800 | 8 Digital inputs, universal, 10RTB | 8 | - |
| URD-1600-8 | 16 Digital inputs, universal, 18RTB | 16 | - |
| URD-3200-4 | 32 Digital inputs, universal, 40Pin | 32 | - |
| URD-0400B | 4 Digital inputs, 120VAC, 10RTB | 4 | - |
| URD-0400C | 4 Digital inputs, 240VAC, 10RTB | 4 | - |
| URD-0200E | 2, 24VDC, High Speed / Encoder Inputs, 10RTD | 2 | - |
| URD-0200D | 2, 5VDC, High Speed / Encoder Inputs, 10RTD | 2 | - |
| URA-04000 | 4 Analog Current Inputs 12bit, 10RTB | - | 4 |
| URA-08000 | 8 Analog Current Inputs 12bit, 10RTB | - | 8 |
| URA-16000-8 | 16 Analog Current Inputs 12bit, 18RTB | - | 16 |
| URA-0400P | 4 Analog Voltage Inputs 12bit, 10RTB | - | 4 |
| URA-0800P | 8 Analog Voltage Inputs 12bit, 10RTB | - | 8 |
| URA-1600P-8 | 16 Analog Voltage Inputs 12bit, 18RTB | - | 16 |
| URA-0400T | 4 Analog Current Inputs 16bit, 10RTB | - | 4 |
| URA-0800T | 8 Analog Current Inputs 16bit, 10RTB | - | 8 |
| URA-1600T-8 | 16 Analog Current Inputs 16bit, 18RTB | - | 16 |
| URA-0400U | 4 Analog Voltage Inputs 16bit, 10RTB | - | 4 |
| URA-0800U | 8 Analog Voltage Inputs 16bit, 10RTB | - | 8 |
| URA-1600U-8 | 16 Analog Voltage Inputs 16bit, 18RTB | - | 16 |
| URS-04RT | 4 RTD / Resistance Input, 10RTB | - | 4 |
| URS-08RT-2 | 8 RTD / Resistance Input, 20Pin | - | 8 |
| URS-04TC | 4 Thermocouple / mV Input, 10RTB | - | 4 |
| URS-08TC-2 | 8 Thermocouple / mV Input, 20Pin | - | 8 |
| URS-02LC-8 | 2 Load Cells / Strain gauge, 18RTB | - | 2 |

Output Modules

| Article | Description | Outputs | | |
|--------------|--|------------|-------|--------|
| | | Transistor | Relay | Analog |
| URD-0004RH | 4 Relay Outputs, 10RTB | - | 4 | - |
| URD-0004SK | 4 Solid State Relay Outputs, 240V, 10RTB | - | 4 | - |
| URD-0004SM | 4 Solid State Relay Outputs, 110V, 10RTB | - | 4 | - |
| URD-0004SN | 4 Solid State Relay Outputs, 24V, 10RTB | - | 4 | - |
| URD-0008NH | 8 Digital Outputs (Sink), 10RTB | 8 | - | - |
| URD-0008NI | 8 Digital Outputs (Sink), 10RTB | 8 | - | - |
| URD-0016NG-8 | 16 Digital Outputs (Sink), 18RTB | 16 | - | - |
| URD-0032NG-4 | 32 Digital Outputs (Sink), 40Pin | 32 | - | - |
| URD-0008CH | 8 Digital Outputs (Source), 10RTB | 8 | - | - |
| URD-0008CI | 8 Digital Outputs (Source), 10RTB | 8 | - | - |
| URD-0016CG-8 | 16 Digital Outputs (Source), 18RTB | 16 | - | - |
| URD-0032CG-4 | 32 Digital Outputs (Source), 40Pin | 32 | - | - |
| URD-02PU | 2 Pulse Outputs, 10RTB | 2 | - | - |
| URD-02PW | 2 PWM Outputs, 10RTB | 2 | - | - |
| URD-04PW | 4 PWM Outputs, 10RTB | 4 | - | - |
| 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-0016X-8 | 16 Analog Voltage Outputs 12bit, 18RTB | - | - | 16 |
| URA-0004Y | 4 Analog Current Outputs 16bit, 10RTB | - | - | 4 |
| URA-0008Y | 8 Analog Current Outputs 16bit, 10RTB | - | - | 8 |
| URA-0004Z | 4 Analog Voltage Outputs 16bit, 10RTB | - | - | 4 |
| URA-0008Z | 8 Analog Voltage Outputs 16bit, 10RTB | - | - | 8 |
| URA-0016Z-8 | 16 Analog Voltage Outputs 16bit, 18RTB | - | - | 16 |

Power Module

| Article Number | Description |
|----------------|--|
| URP-PS24V | Input 24VDC, Output system Power 5VDC/1A |
| URP-C0V0V | 8, 0VDC Potential Distributor |
| URP-C24V24V | 8, 24VDC Potential Distributor |
| URP-C0V24V | 4, 24VDC and 4, 0VDC Potential Distributor |
| URP-PDIST | Universal Field Power Distributer |
| URP-PSHIELD | External Universal Shield Distributer |

VFDs

Easy to Program. Simple to Use.

High performance, cost effective VFDs, ideal for both machines & process control.

Features:

- EMI Filters, Built-In
- Braking units - Built-in
- Heavy-Duty overload capacity, up to 200%
- Coated PCBs: minimize dust penetration damage
- RS485 Modbus RTU fieldbus, Built-in
- Sensorless control: Vector, Torque, volts per Hz
- STO (SIL3)
- Mounting options: Wall, Flange, Rail
- Optional communication and I/O extension
- UL approved, TÜV-SÜD Safety and CE Certified



- Fully integrated • Robust • Broad power & voltage range •

Use as a stand-alone product, or as part of a complete All-in-One package with our controllers.

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 380-480VAC, 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) | | Built-in (≤30kW/40HP) |
| | | Optional (>37kW/50HP) | | Optional (>30kW/40HP) |
| | EMC Filters | Built-In C3 (≥4kW/5HP), Comply with IEC/EN 61800-3 | | Built-In C3, Comply with IEC/EN 61800-3 |
| | | Optional C3 (<4kW/5HP), 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, Flange |
| | | Wall and Flange (>2.2kW/3HP) | | |
| | Cooling | Air-cooling | | |
| | Safe Torque Off | √ | × | |
| Compliance | CE, TUV-SUD Safety Mark, UL and cUL* | CE, UL and cUL | | |

* 0.4-11kw Drives are UL and cUL certified and support 480Vac

VFD Models

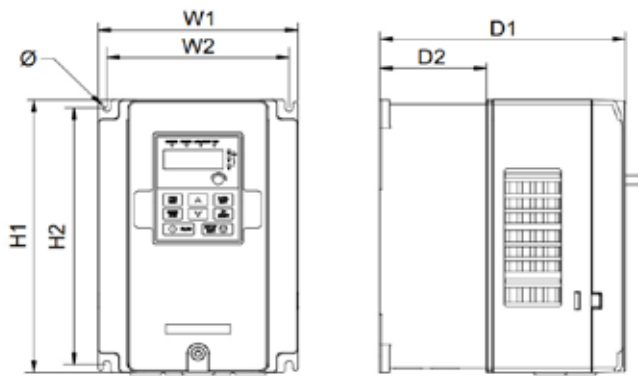


| POWER (KW/HP) | Voltage | Part number | Rated Output current (A) | UL & cUL | Safety (TUV SUD) | Permanent Magnet Control | Extended I/Os |
|---------------|--------------|---------------|--------------------------|----------|------------------|--------------------------|---------------|
| 0.4\0.5 | 1Ph 200-240V | UMI-0004BE-B1 | 2.5 | √ | STO | - | - |
| | | UMI-0004BU-B1 | 2.5 | √ | - | - | - |
| | 3Ph 200-240V | UMI-0004CU-B1 | 2.5 | √ | - | - | - |
| 0.75\1 | 1Ph 200-240V | UMI-0007BE-B1 | 4.2 | √ | STO | - | - |
| | | UMI-0007BU-B1 | 4.2 | √ | - | - | - |
| | 3Ph 200-240V | UMI-0007CU-B1 | 4.2 | √ | - | - | - |
| | | UMI-0007CU-B5 | 4.5 | √ | - | √ | √ |
| | 3Ph 380-480V | UMI-0007EE-B1 | 2.5 | √ | STO | - | - |
| | | UMI-0007EU-B1 | 2.5 | √ | - | - | - |
| 1.5\2 | 1Ph 200-240V | UMI-0015BE-B1 | 7.5 | √ | STO | - | - |
| | | UMI-0015BU-B1 | 7.5 | √ | - | - | - |
| | 3Ph 200-240V | UMI-0015CU-B5 | 7 | √ | - | √ | √ |
| | 3Ph 380-480V | UMI-0015EE-B1 | 4.2 | √ | STO | - | - |
| | | UMI-0015EU-B1 | 4.2 | √ | - | - | - |
| | | UMI-0015EU-B5 | 3.7 | √ | - | √ | √ |
| 2.2\3 | 1Ph 200-240V | UMI-0022BE-B1 | 10 | √ | STO | - | - |
| | | UMI-0022BU-B1 | 10 | √ | - | - | - |
| | 3Ph 200-240V | UMI-0022CU-B5 | 10 | √ | - | √ | √ |
| | 3Ph 380-480V | UMI-0022EE-B1 | 5.5 | √ | STO | - | - |
| | | UMI-0022EU-B1 | 5.5 | √ | - | - | - |
| | | UMI-0022EU-B5 | 5 | √ | - | √ | √ |
| 4\5 | 3Ph 200-240V | UMI-0040CU-B5 | 16 | √ | - | √ | √ |
| | 3Ph 380-480V | UMI-0040EE-B1 | 9.5 | √ | STO | - | - |
| | | UMI-0040EU-B5 | 9.5 | √ | - | √ | √ |
| 5.5\7.5 | 3Ph 200-240V | UMI-0055CU-B5 | 21 | √ | - | √ | √ |
| | 3Ph 380-480V | UMI-0055EE-B1 | 14 | √ | STO | - | - |
| | | UMI-0055EU-B5 | 14 | √ | - | √ | √ |
| 7.5\10 | 3Ph 200-240V | UMI-0075CU-B5 | 30 | √ | - | √ | √ |
| | 3Ph 380-480V | UMI-0075EE-B1 | 18.5 | √ | STO | - | - |
| | | UMI-0075EU-B5 | 18.5 | - | - | √ | √ |

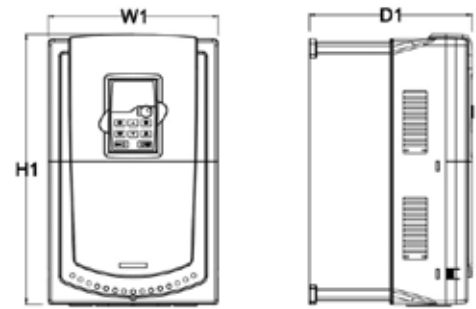


| POWER (KW/HP) | Voltage | Part number | Rated Output current (A) | UL & cUL | Safety (TUV SUD) | Permanent Magnet Control | Extended I/Os |
|---------------|--------------|---------------|--------------------------|----------|------------------|--------------------------|---------------|
| 11\15 | 3Ph 200-240V | UMI-0110CU-B5 | 42 | √ | - | √ | √ |
| | 3Ph 380-480V | UMI-0110EE-B1 | 25 | √ | STO | - | - |
| | | UMI-0110EU-B5 | 25 | √ | - | - | - |
| 15\20 | 3Ph 200-240V | UMI-0150CU-B5 | 55 | √ | - | √ | √ |
| | 3Ph 380-440V | UMI-0150EE-B1 | 32 | - | STO | - | - |
| | 3Ph 380-480V | UMI-0150EU-B5 | 32 | √ | - | √ | √ |
| 18.5\25 | 3Ph 200-240V | UMI-0185CU-B5 | 70 | √ | - | √ | √ |
| | 3Ph 380-440V | UMI-0185EE-B1 | 38 | - | STO | - | - |
| | 3Ph 380-480V | UMI-0185EU-B5 | 38 | √ | - | √ | √ |
| 22\30 | 3Ph 200-240V | UMI-0220CU-B5 | 80 | √ | - | √ | √ |
| | 3Ph 380-440V | UMI-0220EE-B1 | 45 | - | STO | - | - |
| | 3Ph 380-480V | UMI-0220EU-B5 | 45 | √ | - | √ | √ |
| 30\40 | 3Ph 200-240V | UMI-0300CU-B5 | 110 | √ | - | √ | √ |
| | 3Ph 380-440V | UMI-0300EE-B1 | 60 | - | STO | - | - |
| | 3Ph 380-480V | UMI-0300EU-B5 | 60 | √ | - | √ | √ |
| 37\50 | 3Ph 200-240V | UMI-0370CU-B5 | 130 | √ | - | √ | √ |
| | 3Ph 380-440V | UMI-0370EE-B1 | 75 | - | STO | - | - |
| | 3Ph 380-480V | UMI-0370EU-B5 | 75 | √ | - | √ | √ |
| 45\60 | 3Ph 200-240V | UMI-0450CU-B5 | 160 | √ | - | √ | √ |
| | 3Ph 380-440V | UMI-0450EE-B1 | 92 | - | STO | - | - |
| | 3Ph 380-480V | UMI-0450EU-B5 | 92 | √ | - | √ | √ |
| 55\75 | 3Ph 200-240V | UMI-0550CU-B5 | 200 | √ | - | √ | √ |
| | 3Ph 380-440V | UMI-0550EE-B1 | 115 | - | STO | - | - |
| | 3Ph 380-480V | UMI-0550EU-B5 | 115 | √ | - | √ | √ |
| 75\100 | 3Ph 380-440V | UMI-0750EE-B1 | 150 | - | STO | - | - |
| | 3Ph 380-480V | UMI-0750EU-B5 | 150 | √ | - | √ | √ |
| 90\120 | 3Ph 380-440V | UMI-0900EE-B1 | 180 | - | STO | - | - |
| | 3Ph 380-480V | UMI-0900EU-B5 | 180 | √ | - | √ | √ |
| 110\150 | 3Ph 380-440V | UMI-1100EE-B1 | 215 | - | STO | - | - |
| | 3Ph 380-480V | UMI-1100EU-B5 | 215 | √ | - | √ | √ |

UMI- B1: Drive Dimensions



UMI- B5: Drive Dimensions



| Model | W1 | H1 | D1 | D2 | Weight (kg) |
|---------------|-----|-------|-------|-------|-------------|
| UMI-0004BE-B1 | 160 | 123.5 | 120.3 | 120.3 | 0.9 |
| UMI-0007BE-B1 | | | | | |
| UMI-0004BU-B1 | | | | | |
| UMI-0007BU-B1 | | | | | |
| UMI-0015BE-B1 | 80 | 185 | 140.5 | 137.3 | 1.2 |
| UMI-0022BE-B1 | | | | | |
| UMI-0015BU-B1 | | | | | |
| UMI-0004CU-B1 | | | | | |
| UMI-0007CU-B1 | | | | | 1 |
| UMI-0022BU-B1 | | | | | |
| UMI-0007EE-B1 | | | | | |
| UMI-0015EE-B1 | | | | | |
| UMI-0022EE-B1 | 170 | 320 | 196.3 | 113 | 5.6 |
| UMI-0007EU-B1 | | | | | 5.9 |
| UMI-0015EU-B1 | 200 | 340.6 | 184.3 | 104.5 | 9 |
| UMI-0022EU-B1 | | | | | |
| UMI-0040EE-B1 | 250 | 400 | 202 | 123.5 | 15.5 |
| UMI-0055EE-B1 | | | | | |
| UMI-0075EE-B1 | 282 | 560 | 238 | 138 | 25 |
| UMI-0110EE-B1 | | | | | |
| UMI-0150EE-B1 | | | | | |
| UMI-0185EE-B1 | 338 | 554 | 329 | - | 45 |
| UMI-0220EE-B1 | | | | | |
| UMI-0300EE-B1 | 250 | 400 | 202 | 123.5 | 15.5 |
| UMI-0370EE-B1 | | | | | |
| UMI-0450EE-B1 | 282 | 560 | 238 | 138 | 25 |
| UMI-0550EE-B1 | | | | | |
| UMI-0750EE-B1 | | | | | |
| UMI-0900EE-B1 | 338 | 554 | 329 | - | 45 |
| UMI-1100EE-B1 | | | | | |

| Model | W1 | H1 | D1 | Weight (kg) |
|---------------|-----|-----|-----|-------------|
| UMI-0007CU-B5 | 126 | 196 | 175 | 1.2 |
| UMI-0015EU-B5 | | | | 2.5 |
| UMI-0022EU-B5 | | | | 2.5 |
| UMI-0015CU-B5 | 146 | 263 | 181 | 4 |
| UMI-0022CU-B5 | | | | |
| UMI-0040EU-B5 | | | | |
| UMI-0055EU-B5 | 170 | 332 | 216 | 7 |
| UMI-0040CU-B5 | | | | |
| UMI-0055CU-B5 | | | | |
| UMI-0750EU-B5 | 230 | 342 | 216 | 8 |
| UMI-0110EU-B5 | | | | |
| UMI-0075CU-B5 | | | | |
| UMI-0150EU-B5 | 255 | 407 | 245 | 10 |
| UMI-0185EU-B5 | | | | |
| UMI-0110CU-B5 | | | | |
| UMI-0150CU-B5 | 270 | 555 | 325 | 30 |
| UMI-0220EU-B5 | | | | |
| UMI-0300EU-B5 | | | | |
| UMI-0185CU-B5 | 325 | 680 | 365 | 47 |
| UMI-0220CU-B5 | | | | |
| UMI-0300CU-B5 | | | | |
| UMI-0370EU-B5 | 325 | 680 | 365 | 47 |
| UMI-0450EU-B5 | | | | |
| UMI-0550EU-B5 | 325 | 680 | 365 | 47 |
| UMI-0370CU-B5 | | | | |
| UMI-0450CU-B5 | 325 | 680 | 365 | 47 |
| UMI-0550CU-B5 | | | | |
| UMI-0750EU-B5 | 325 | 680 | 365 | 47 |
| UMI-0900EU-B5 | | | | |
| UMI-1100EU-B5 | 325 | 680 | 365 | 47 |
| UMI-1100EU-B5 | | | | |

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 |

* 0.4-11kw Drives are UL and cUL certified and support 480Vac



To Find Your Local Distributor, Visit Our Website:
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