

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 (nnp)	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	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	—	—	—	—	—
	NEW! 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 (nnp)	2 250kHz	8
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(nnp)	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.