

Unitronics' UniStream™ platform comprises control devices that provide robust, flexible solutions for industrial automation.

This guide provides basic installation information for the UniStream™ UAG-BACK-IOADP.

Technical specifications may be downloaded from the Unitronics website.

The UniStream™ platform comprises UAG-BACK-IOADP controllers, US15 controllers, and local I/O modules that snap together to form an all-in-one Programmable Logic Controller (PLC).

Expand the I/O configuration using a Local Expansion Kit or remotely via CANbus.



I/O Options

Integrate I/Os into your system by using:

- On-board I/Os: snap onto the panel for an all-in-one configuration
- Local I/O via a Local Expansion Kit

Before You Begin



Before installing the device, the installer must:

- Read and understand this document.
- Verify the Kit Contents.

Note that the UAG-BACK-IOADP is intended to be installed on the back of an US15 controller.

Alert Symbols and General Restrictions

When any of the following symbols appear, read the associated information carefully.

Symbol	Meaning	Description
	Danger	The identified danger causes physical and property damage.
	Warning	The identified danger could cause physical and property damage.
Caution	Caution	Use caution.

- All examples and diagrams are intended to aid understanding, and do not guarantee operation. Unitronics accepts no responsibility for actual use of this product based on these examples.
- Please dispose of this product according to local and national standards and regulations.
- This product should be installed only by qualified personnel.



- Failure to comply with appropriate safety guidelines can cause severe injury or property damage.
- Do not attempt to use this device with parameters that exceed permissible levels.
- Do not connect/disconnect the device when power is on.

Environmental Considerations

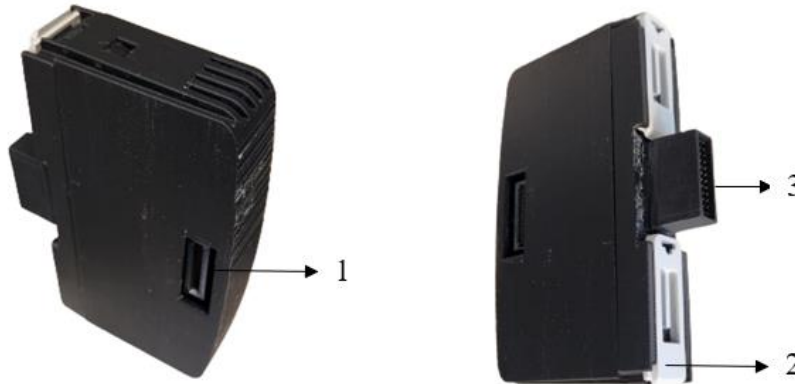


- Ventilation: 10mm (0.4") of space is required between the device top/bottom edges and the enclosure's walls.
- Do not install in areas with: excessive or conductive dust, corrosive or flammable gas, moisture or rain, excessive heat, regular impact shocks or excessive vibration, in accordance with the standards and limitations given in the product's technical specification sheet.
- Do not place in water or let water leak onto the unit.
- Do not allow debris to fall inside the unit during installation.
- Install at maximum distance from high-voltage cables and power equipment.

Kit Contents

- 1 UAG-BACK-IOADP

UAG-BACK-IOADP Diagram



UAG-BACK-IOADP Front and Rear View

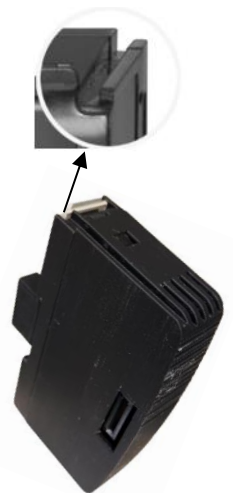
1	IO Bus connector, shipped covered. Leave covered when not in use.
2	DIN-rail clips
3	UAG-BACK-IOADP connector to panel

UAG-BACK-IOADP

The Adapter Jack on the back of the US15 controller provides the connection point for the UAG-BACK-IOADP, including power.

The DIN-rail type structure on the back of the panel provides the physical support.

1. Remove the Adapter Jack cover from the panel (the cover may be saved for future use).
2. If a Uni-I/O™ module, or a Local Expansion Kit is to be connected to the UAG-BACK-IOADP, remove the IO Bus connector cover.
3. Plug the UAG-BACK-IOADP into the US15 controller Adapter Jack. If an adjacent module is already installed, slide the UAG-BACK-IOADP into place via the guide tunnels shown in the accompanying figure.
4. Verify that the DIN-rail clips located on the top and bottom of the UAG-BACK-IOADP have snapped onto the DIN-rail structure on the back of the panel.



Removing the UAG-BACK-IOADP

1. Power off the US15 controller before removing the UAG-BACK-IOADP.
2. Disconnect the module connected to the UAG-BACK-IOADP (by pushing its Bus Connector lock to the right).
3. On the UAG-BACK-IOADP pull the top DIN-rail clip up and the bottom clip down.
4. Pull the UAG-BACK-IOADP out of its place.

About the UAG-BACK-IOADP's IO Bus Connector

- When no module is connected to the UAG-BACK-IOADP, its IO Bus Connector Cover must remain installed.
- Turn off system power before connecting or disconnecting modules.

UAG-BACK-IOADP

Technical Specifications

UAG-BACK-IOADP

The UniStream® UAG-BACK-IOADP is designed to be plugged onto the back of a UniStream® US15 controller. The UAG-BACK-IOADP is powered directly from the US15 controller. Uni-I/O™ modules may be snapped next to the UAG-BACK-IOADP to create an all-in-one HMI + PLC controller with an onboard I/O configuration.

You can expand the onboard I/O configuration of the all-in-one controller via a Local Expansion Kit ⁽⁰⁾.

Installation Guides are available in the Unitronics Technical Library at www.unitronicsplc.com.

General	
I/O support	Up to 2,048 I/O points
Local Uni-I/O™ support ⁽¹⁾	Up to 8 I/O modules with no additional power supply Up to 16 I/O modules with a Local Expansion Power Kit
Note that the numbers above relate to Uni-I/O. You can mix Uni-I/O with Uni-I/O Wide modules, considering that 1 Uni-I/O Wide module equals 1½ Uni-I/O module. For example, the UAG-BACK-IOADP can support 10 Uni-I/O Wide and 1 Uni-I/O modules in any order, with a local Expansion Power Kit.	
Connectors	IO Bus connector – internal bus interface to a Uni-I/O™. US15 controller Adapter Jack – interface to the Adapter Jack of the UniStream® US15

Environmental	
Protection	IP20, NEMA1
Operating temperature	0°C to 50°C (32°F to 122°F)
Storage temperature	-20°C to 60°C (-4°F to 140°F)
Relative Humidity (RH)	5% to 95% (non-condensing)
Operating Altitude	2,000 m (6,562 ft)
Shock	IEC 60068-2-27, 15G, 11ms duration
Vibration	IEC 60068-2-6, 5Hz to 8.4Hz, 3.5mm constant amplitude, 8.4Hz to 150Hz, 1G acceleration

Dimensions	
Weight	0.07Kg (0.154 lb)

Notes

1. The UAG-BACK-IOADP, without any additional power supply, can support up to 8 Uni-I/O™ modules, either on-board the US15 controller or via a Local Expansion Kit.
2. If more Uni-I/O™ modules are required, you must use a Local Expansion Kit with a power supply, this enables a single UAG-BACK-IOADP to support up to 16 modules.
Note that the number of on-board Uni-I/O™ modules is dependent on the US15 controller model, please refer to the specification document of the corresponding US15 controller.

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