UniStream™ Uni-I/O™ Modules

Technical Specifications

UID-0808R, UID-0016R, UID-0808T, UID-0016T, UID-1600

This guide provides specifications for Unitronics' Uni-I/O™ Modules.

Uni-I/O modules are compatible with UniStream™ Programmable Logic Controllers. They may be either snapped onto the back of a UniStream™ HMI Panel next to a CPU-for-Panel to create an all-in-one HMI + PLC controller, or installed on a standard DIN Rail using a Local Expansion Kit.

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

This specification sheet refers to the models in the following table:

Part no.	**UID-0808R**	**UID-0016R**	**UID-0808T**	**UID-0016T**	**UID-1600**
Inputs	8	-	8	-	16
Type	Sink (pnp) or Source (npn), 24VDC	-	Sink (pnp) or Source (npn), 24VDC	-	Sink (pnp) or Source (npn), 24VDC
Outputs	8	16	8	16	
Type	Relay, 24VDC (power supply)		Transistor, Source (pnp), 24VDC		
Isolation	All inputs and outputs are isolated				

Inputs	**UID-1600**	**UID-0808R, UID-0808T**
Number of inputs	16	8
Type	Sink or Source	
Isolation groups	Four groups of 4 inputs each	Two groups of 4 inputs each
Isolation voltage		
Group to bus	500VAC for 1 minute	
Group to group	500VAC for 1 minute	
Input to input within group	None	
Nominal voltage	24VDC @ 6mA	
Input voltage		
Sink/Source	On state: 15-30VDC, 4mA minimum Off state: 0-5VDC, 1mA maximum	
Nominal impedance	4kΩ	
Filter	Settable between 1 to 32 ms (individually per group)	

Outputs	UID-0808R	UID-0016R	UID-0808T	UID-0016T
Number of outputs	8	16	8	16
Output type	Relay, SPST-NO (Form A)		Transistor, Source	
Isolation groups	Two groups of 4 outputs each	Four groups of 4 outputs each	One group of 8 outputs	One group of 16 outputs
Isolation voltage				
Group to bus	1,500VAC for 1 minute		500VAC for 1 minute	
Group to group	1,500VAC for 1 minute		-	
Output to output within group	None		None	
Output power supply to bus	None		500VAC for 1 minute	
Output power supply to output	1,500VAC for 1 minute		None	
Current	2A maximum per output (Resistive load)		0.5A maximum per output. UID-0016T: total cumulative output current for O4-O7 and O12-O15 cannot exceed 2A.	
Voltage	250VAC / 30VDC maximum		See Outputs Power Supply specfication	
Minimum load	1mA, 5VDC		-	
ON state voltage drop	-		0.5V maximum	
OFF state leakage current	-		10µA maximum	
Switching times	10ms maximum		Turn-on/off: 80µs max. (Load resistance < 4kΩ)	
Short-circuit protection	None		Yes	
Life expectancy [1]	100k operations at maximum load		-	

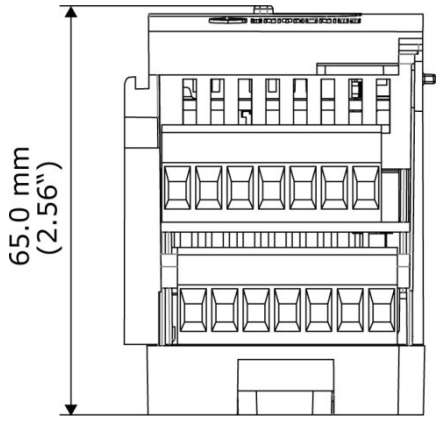
Outputs Power Supply	UID-0808R	UID-0016R	UID-0808T	UID-0016T
Nominal operating voltage	24VDC			
Operating voltage	20.4 – 28.8VDC			
Maximum current consumption	40mA@24VDC	80mA@24VDC	30mA@24VDC[2]	60mA@24VDC[2]

IO/COM Bus	UID-0808R	UID-0016R	UID-0808T	UID-0016T	UID-1600
Bus maximum current consumption	100mA	90mA	110mA	120mA	100mA

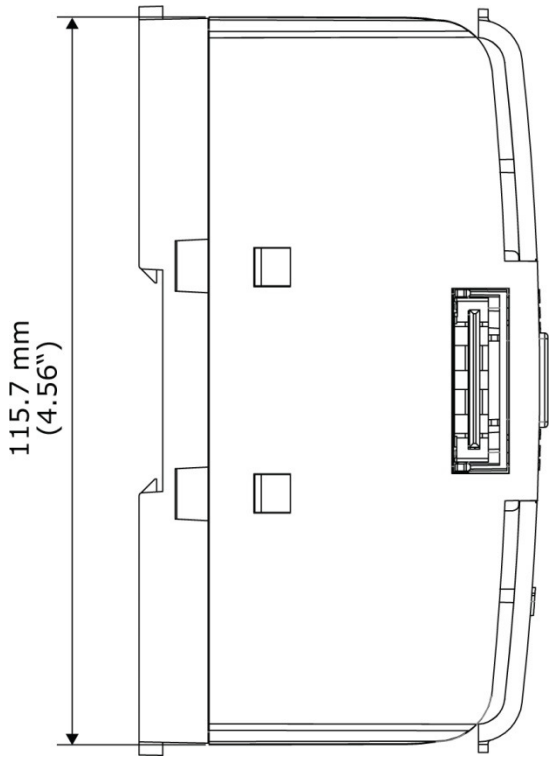
LED Indications			
Input LEDs	Green	Input state	
Output LEDs	Green	Output state	
Status LED	A triple color LED. Indications are as follows:		
	Color	**LED State**	**Status**
	Green	On	Operating normally
		Slow blink	Boot
		Rapid blink	OS initialization
	Green/Red	Slow blink	Configuration mismatch
	Red	On	Output short-circuit (models with transistor outputs)
		Slow blink	No IO exchange
		Rapid blink	Communication error
	Orange	Rapid blink	OS Upgrade

Environmental	
Protection	IP20, NEMA1
Operating temperature	-20°C to 55°C (-4°F to 131°F)
Storage temperature	-30°C to 70°C (-22°F to 158°F)
Relative Humidity (RH)	5% to 95% (non-condensing)
Operating Altitude	2,000m (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.

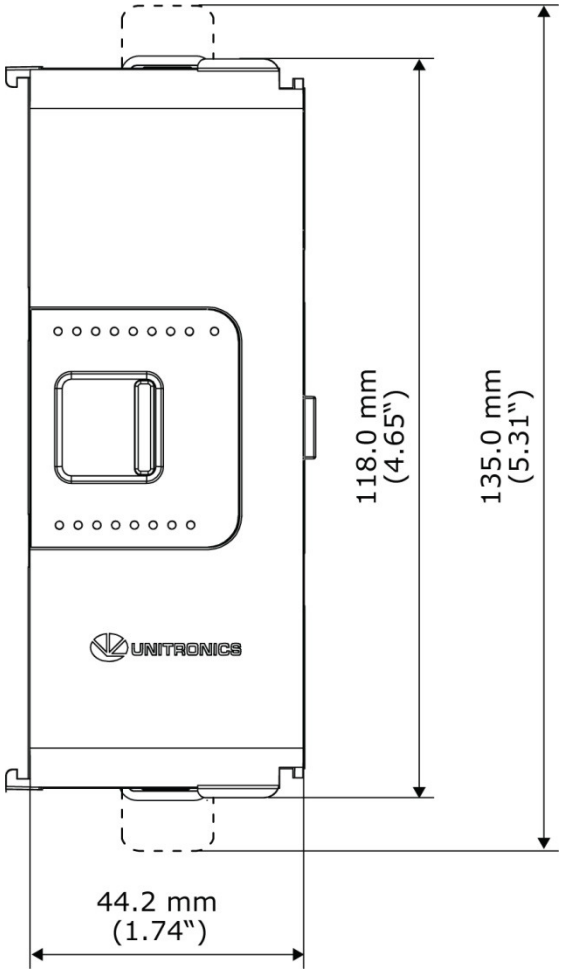
Dimensions	UID-0808R	UID-0016R	UID-0808T	UID-0016T	UID-1600
Weight	0.15 Kg (0.331 lb)	0.17 Kg (0.374 lb)	0.13 Kg (0.287 lb)	0.13 Kg (0.287 lb)	0.13 Kg (0.287 lb)
Size	Identical for all models, as shown in the images below				



Top View



Side View



Front View

Notes

1. Life expectancy of the relay contacts depends on the application that they are used in. The product's installation guide provides procedures for using the contacts with long cables or with inductive loads.
2. Current consumption does not include load current.

DOC27004-A7 02/15