

UniStream™ Uni-I/O™ Modules

Technical Specifications
UID-W1616R, UID-W1616T

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

Uni-I/O Wide 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-W1616R	UID-W1616T
Inputs	16	16
Type	Sink (pnp) or Source (npn), 24VDC	Sink (pnp) or Source (npn), 24VDC
Outputs	16	16
Type	Relay, 24VDC (power supply)	Transistor, Source (pnp), 24VDC
Isolation	All inputs and outputs are isolated	

Inputs	UID-W1616R	UID-W1616T
Number of inputs	16	16
Type	Sink or Source	
Isolation groups	Two groups of 8 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-W1616R	UID-W1616T
Number of outputs	16	16
Output type	Relay, SPST-NO (Form A)	Transistor, Source
Isolation groups	Two groups of 8 outputs each	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 8A maximum per group (Resistive load)	0.5A maximum per output.
Voltage	250VAC / 30VDC maximum	See Outputs Power Supply specification
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	-

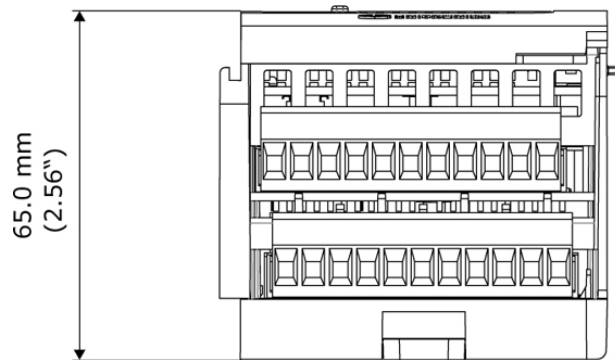
Outputs Power Supply	UID-W1616R	UID-W1616T
Nominal operating voltage	24VDC	
Operating voltage	20.4 – 28.8VDC	
Maximum current consumption	80mA@24VDC	60mA@24VDC ⁽²⁾

IO/COM Bus	UID-W1616R	UID-W1616T
Bus maximum current consumption	100mA	120mA

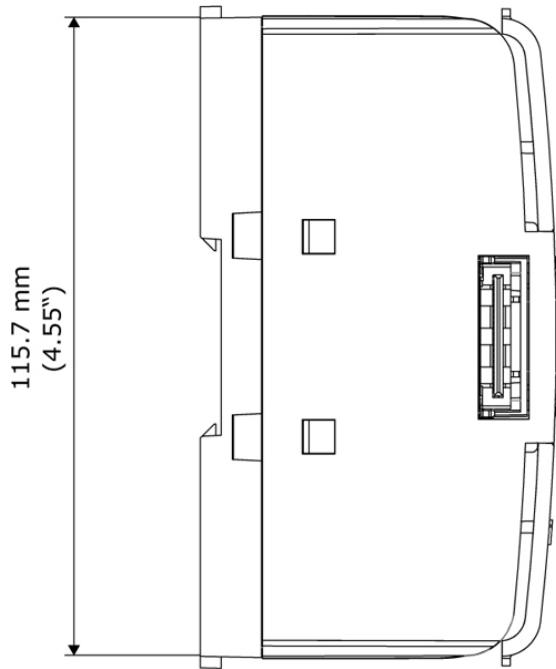
LED Indications			
Input LEDs	Green	Input state	
Output LEDs	Green	Output state	
Status LED	A triple color LED. Indications are as follows:		
	Color	LED State	Status
	Green	On	Operating normally
		Slow blink	Boot
		Rapid blink	OS initialization
	Green/Red	Slow blink	Configuration mismatch
	Red	Slow blink	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.

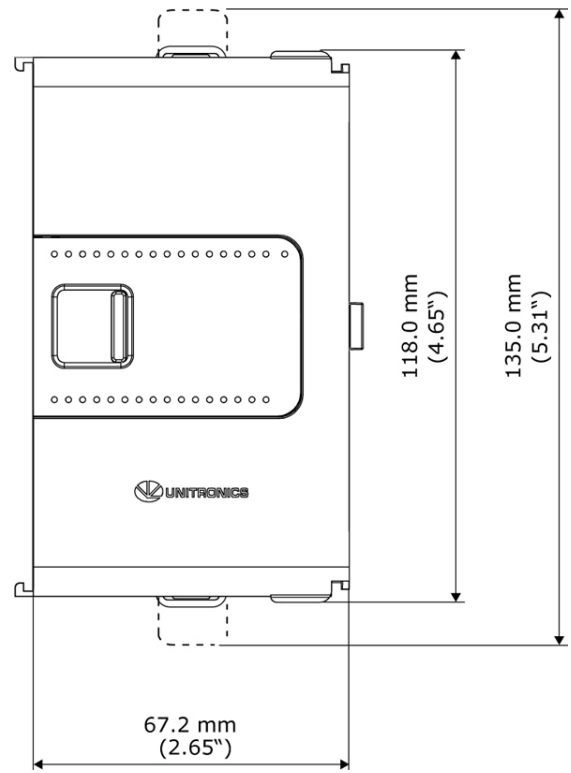
Dimensions	UID-W1616R	UID-W1616T
Weight	0.230 kg (0.507 lb)	0.226 kg (0.498 lb)
Size	Identical for all models, as shown in the images below	



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.

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