

# Pulse Input Adapter (S-UCx-M00x) Data Sheet



The pulse input adapters are used to log the number of switch closures per interval and are designed to work with smart sensor-compatible HOBO® loggers and stations. The adapter has a plug-in modular connector that allows it to be added easily to these devices. Two versions are available: mechanical contact closure (S-UCD-M00x) to use with tipping-bucket rain gauges (for example) and solid-state electronic switches (S-UCC-M00x) for use with compatible pulse output sensors.

## Specifications

	S-UCC-M00x For Electronic Switches	S-UCD-M00x For Contact Closures
<b>Maximum Input Frequency</b>	120 Hz (120 pulses per second)	2 Hz (2 pulses per second)
<b>Measurement Range</b>	0–65,533 pulses per logging interval	
<b>Resolution</b>	1 pulse	
<b>Lockout Time</b>	45 $\mu$ s $\pm$ 10%	327 ms $\pm$ 10%
<b>Recommended Input Type</b>	Electronic solid state switch closure or CMOS-level digital output (example: FET, opto-FET or open collector)	Mechanical contact closure (example: reed switch in a tipping-bucket rain gauge)
<b>Preferred Switch State*</b>	Active low input	Normally open
<b>Edge Detection</b>	Falling edge, Schmitt Trigger buffer (logic levels: low $\leq$ 0.6 V, high $\geq$ 2.7 V)	
<b>Minimum Pulse Width</b>	1 ms	
<b>Input/Output Impedance</b>	100 K $\Omega$	
<b>Open Circuit Input Voltage</b>	3.3 V	
<b>Maximum Input Voltage</b>	3.6 V	
<b>User Connection</b>	24 AWG wires, 2 leads: white(+), black(-)	
<b>Operating Temperature Range</b>	-40° to 75°C (-40° to 167°F)	
<b>Overall Cable Length</b>	6.5 m (21.3 ft.) or 1.57 m (5.1 ft.)	
<b>Length of Smart Sensor Cable**</b>	50 cm (1.6 ft.)	
<b>Housing</b>	Weatherproof Xenoy housing protects input adapter electronics	
<b>Housing Dimensions</b>	12.7 x 2.9 cm (5 x 1.13 in.)	
<b>Weight</b>	S-UCx-M001: 114 g (4 oz.); S-UCx-M006: 250 g (9 oz)	
<b>Bits per Sample</b>	16	
<b>Number of Data Channels</b>	1	
<b>Measurement Averaging Option</b>	No (reports the number of pulses over the logging interval)	
<b>CE</b>	The CE Marking identifies this product as complying with all relevant directives in the European Union (EU).	

\* For maximum battery life, the pulse input adapters should be used with their preferred switch type. The adapters will work with active high inputs (S-UCC) and normally closed switches (S-UCD), but battery life will not be optimized.

\*\* A single HOBO station can accommodate 15 data channels and up to 100 m (328 ft) of smart sensor cable (the digital communications portion of the sensor cables).

### Pulse Input Adapter

Models: S-UCC-M001  
S-UCC-M006  
S-UCD-M001  
S-UCD-M006

#### Items included:

- Two wire nuts



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