Датчик влажности листвы (S-LWA-M003) мануал

The leaf wetness smart sensor is designed to work with HOBO® stations with its plug-in modular connector. All calibration parameters are stored inside the smart sensor, which automatically communicates configuration information to the station without the need for any programming, calibration, or extensive setup. Unlike other leaf wetness sensors, the HOBO leaf wetness smart sensor does not require any painting or coating—it is ready to use.

Leaf Wetness Smart Sensor

S-LWA-M003

Items Included:

- Mounting bracket
- U-bolt
- Tie wraps

Спецификация

Диапазон измерения	0 (dry) to 100% (wet)
Тип сенсора	ёмкостная модуляция
Взаимозаменяемость Sensors (Over the Range 10–90% Wet)	±10%
Повторяемость	±5%; see Note 1
Разрешение	0.59%
Стабильность (разброс)	< ±5% per year (in typical growth conditions)
Срок службы	3 years in typical growth conditions
Диапазон температур	-40°C to 70°C (-40°F to 158°F)
Защита	влагозащищён
Материал сенсора	PVC housing, epoxy potting compound, nylon grommet, FR-4 circuit board, PVC cable jacket
материал крепежа	PVC mounting bracket, UV-stable nylon cable ties, zinc dichromate plated steel U-bolts
Бит на выборку	8
Число каналов*	1
Measurement Averaging Option	No
Размеры	Sensor grid: 4.7 cm x 5.1 cm (1.8 in x 2.0 in) Housing: 12.2 cm length x 1.8 cm diameter (4.8 in x 0.7 in) Mounting bracket: 20 cm x 3 cm x 0.5 cm (8 in x 1.3 in x 0.2 in)
Weight (Sensor and Cable)	127 g (4.5 oz)
Weight (Including Mounting Bracket)	290 g (10.2 oz)
Cable Length Available	3.0 m (9.8 ft)
Length of Smart Sensor Network Cable*	3.0 m (9.8 ft)
CE	The CE Marking identifies this product as complying with all relevant directives in the European Union (EU).

* A single 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).

Note 1 Given the nature of the sensor design and sensor operating frequency, the system has inherent susceptibilities to Radio Frequency signals. The repeatability specification when subjected to certain RFI environments, such as those outlined in IEC 61000-4-3 and IEC 61000-4-6, may be significantly reduced.

The system level repeatability will be particularly affected when placed in an electric field of 3 V/m or greater in the 150 KHz to 1000 MHz range. RFI mitigation practices and physical deployment changes may reduce the system susceptibility. If deployments are planned in high RFI energy environments, Onset recommends on-site testing to determine system level repeatability.