

# Parameters

Sensor	ID	Range	Resolution	Min. Detection	Working Principle	Expected Sensor Life
Wind Speed	OZWSD_1	0-40 m/s	0.1 m/s	0.1 m/s	Ultrasonic	2 years
Wind Direction		0-359°	1°	1°		
Rain	OZRAIN_1	N.A.	0.25 mm	0.25 mm	Tipping bucket	
Ambient Noise	OZN_1	Up to 140 dB	1 dB	0.5 dB	Capacitive	2 years
Temperature	OZTEMP_1	-40°C to 125°C	0.01 °C	-40°C	Solid State Semiconductor Sensing	
Humidity	OZHUM_1	100% Rh	0.10%	0.10%		
Barometric Pressure	OZPRES_1	300-1100 hPa	0.18 Pa	300 hPa		
Pyranometer Solar Radiation 300 - 1100 nm	OZUV_1	Up to 1,00,000 Lux	1 Lux	1 Lux	Photoconductivity	3 years
		Upto 5000 Lux	0.1 Lux	0.1 Lux		
		0.1-100,000 uW/cm <sup>2</sup>	0.1 uW/cm <sup>2</sup>	0.1 uW/cm <sup>2</sup>		
		0-12	-	-		

**Note:** Expected Sensor Life can vary, subject to actual concentration on-site. In the interest of continued product improvement, we reserve the right to change design features and specifications without prior notification. The data contained in this document is for guidance only. Oizom® accepts no liability for any consequential losses, injury or damage resulting from the use of this document or the information contained within.

## External Modules



**Noise Sensor**  
OZN\_1\*  
**Working Principle:** Capacitive  
**Range:** Upto 140 dB



**Vibration Sensors**  
PPV: +/- 2G  
**Range frequency:** 0.5 - 250 Hz  
**Range velocity:** ±50 mm/s (±2 in/s)  
**Working Principle:** MEMS



**Pyranometer**  
OZUV\_1\*  
**Working Principle:** Photoconductivity



**Soil Sensor**  
OZSOIL\_1\*  
**Measurement Types:** NPK, pH, EC, TEMP, HUM

Vibration sensors and soil moisture sensors are available as optional features upon specific customer requests.

# Specifications

## Mechanical

Size	360mm (H) x 328mm (W) x 200mm (D)
Weight	8.7 Kg (instrument weight)
Material	Aluminum Magnesium Alloy, Mild-steel (With Powder Coating), FRP
Certifications	CE, NEMA 4X, IP66, RoHS, IMD

## Electrical

Avg. Power Consumption	Up to 7 Watt (Actual consumption will vary upon the number of parameters)
Power Input Options	AC : External 110-240V AC, 50-60Hz DC : Uninterrupted 24V DC, 2 Ampere 60 Watt 24V Solar Panel
SMPS Specs	24V, 2Amps output UL-62368 & CAN/CSA C22.2 Certified
Battery Backup Time	Up to 12 Hours
Battery Specs	Lithium iron phosphate (LiFePO <sub>4</sub> ) battery cell with rated voltage 12.8V Capacity 6Ah

## Technical

Processor	Quad Core ARM Cortex
Memory	2GB RAM 8GB eMMC ROM
Device Interface	On-device Software / API / Cloud Platform
Internal Data Storage	Upto 8 GB or 90 days

## Environmental

Operating Temperature	-20 °C to 60 °C
Operating Humidity	0-93% RH
Recommended Humidity	15-90% RH
Storage Conditions	10 - 40°C