

Technical Specification

Processor	Quad Core ARM Cortex
Memory	2GB RAM / 8GB eMMC ROM
Device Interface	On-device Software / API
Operating Temperature	-20 °C to 60 °C
Operating Humidity	0-95% RH

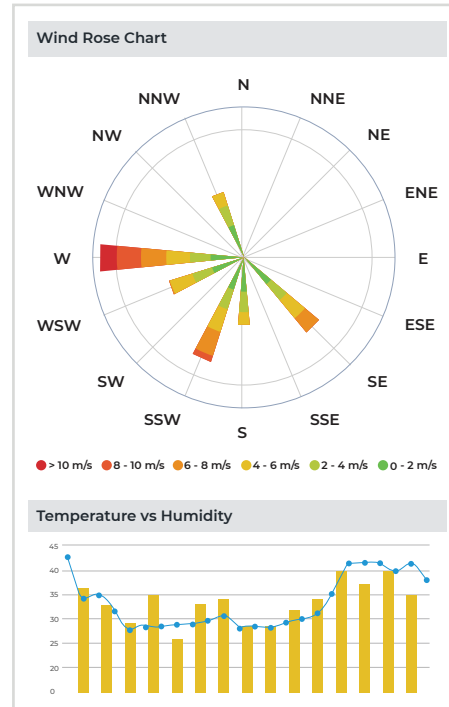
Connectivity Options		Specification
Wireless	GSM	Global 2G / 3G / 4G
	LORA	868 MHz / 915 MHz
	LTE	CAT-M1
	NB-Iot	CAT-NB1
	Sigfox	868 to 869 MHz, 902 to 928 MHz
	Wifi	AP Mode and Station Mode
Wired	Ethernet	Static / DHCP Configuration
	Modbus	RS485 RTU / TCP
	Relay Output	2 Channel

Communication

Data Interval	2-30 minutes (configurable)
Data-push Protocol	HTTP post request to host-server
Data-pull	HTTP request on device IP
Firmware Updates	Over the Air
Standby Connectivity	GSM (2G/3G) for remote diagnosis, FOTA updates and cloud calibration

Power

Avg. Power Consumption	5 Watt (Actual consumption depends upon the number of parameters)
Power Input Options	External 110-230V AC 50-60Hz, 40Watt Monocrystal Solar Panel
SMPS Specs	24V, 2Amps output UL-62368 & CAN/CSA C22.2 Certified
Battery Backup Time	12 Hours
Battery Specs	Lithium iron phosphate (LiFePO4) battery cell with rated voltage 12.8V Capacity 6Ah



Parameters

ID	Parameter	Range	Resolution	Min. Detection	Working Principle	Expected Sensor Life
OZWSD_1	Wind Speed	0-40 m/s	0.1 m/s	0.1 m/s	Ultrasonic	3 years
	Wind Direction	0-359°	1°	1°		
OZFLD_1	Flood Monitoring	Upto 765 cm	1 cm	1 cm	Tipping bucket	
OZRAIN_1	Rainfall Monitoring	N.A.	0.5 mm	0.5 mm	Capacitance	2 years
OZN_1	Ambient Noise	Up to 140 dB	1 dB	0.5 dB	Capacitance	2 years
OZLL_1	Light Intensity	Up to 1,00,000 Lux	1 Lux	1 Lux	Photoconductivity	3 years
OZUV_1	UV Radiation	0.1-100,000 uW/cm²	0.1 uW/cm²	0.1 uW/cm²		
OZVLI_1	Visible Light Intensity	Upto 5000 Lux	0.1 Lux	0.1 Lux		
OZTEMP_1	Temperature	-40°C to 125°C	0.01 °C	-40°C	Solid State Semiconductor Sensing	2 years
OZHUM_1	Humidity	100% Rh	0.1%	0.1%		
OZPRES_1	Barometric Pressure	300-1100 hPa	0.18 Pa	300 hPa		

External Modules

(optional) 1



Flood Sensor
 Ultrasonic sensor
 765 cm



Soil Moisture Sensor
 Capacitive Sensing
 0-100% Volumetric Moisture



Noise Sensor
 Capacitance
 Upto 140 dB