



MacSync-LW6 Overview:

MacSync-WS6 is a rugged and intelligent LoRaWAN® weather station designed for reliable, real-time environmental monitoring. Built for harsh environments, it features a robust, UV-resistant housing and IP66-rated protection, ensuring long-term durability even in extreme weather conditions

Whether deployed in vineyards, solar farms, research facilities, or smart infrastructure projects, MacSync-LW6 provides the environmental intelligence you need to make data-driven decisions with plug-&-play compatibility across the MacSync ecosystem.

Sensors

Amb. Temperature

Humidity

Wind Speed

Wind Direction

Atm. Pressure

Rainfall

Features

Wireless Technology



High-Precision Multi-Parameter Sensors

For accurate weather sensing

LoRaWAN® Class A & C communication

Communication for flexible uplink strategies

IP66-Rated Enclosure (Sensor)

Designed for industrial & outdoor environments

Supports periodic, threshold-based, & event-driven uplinks

BLE Support

Easy local configuration and diagnostics with Maya

Ultra-long-range transmission

Up to 08 km line of sight

Supports Macnman Beam Protocol

Direct control, & local device-to-device actions

Secure onboarding with pre-flashed DevEUI / AppEUI / AppKey

Optional Onboard Data Buffering

To prevent data loss in case of network downtime

Compatible with all LoRaWAN® network servers & gateways



Specifications

Measurement			
Parameter	Range	Accuracy	Resolution
Ambient Temperature	-40°C to +85°C	±0.3°C @ 25°C	0.01°C
Relative Humidity	0% to 100% RH	±3% RH(@90 %RH)	0.01% RH
Wind Speed	0–60 m/s	±(0.3 + 0.03V) m/s	0.01 m/s
Wind Direction	0°–359.9°	±3° (Speed< 10 m/s)	0.1°
Atmospheric Pressure	500-1100 hPa	±0.5 hPa (25°C)	0.1 hPa
Rainfall	0–200 mm/h	0.2 mm	

Wireless Transmission	
Technology	LoRaWAN® (v1.0.4), Macnman Beam Protocol
Antenna	Internal high-efficiency antenna
Supported Bands	IN865 / RU864 / EU868 / US915 / AU915 / KR920 / AS923-1/2/3/4
Tx Power	16 dBm @ 868 MHz 20 dBm @ 915 MHz 19 dBm @ 470 MHz
Sensitivity	-137 dBm @ 300 bps
Activation	OTAA / ABP
LoRaWAN® Class	Class A (default), Configurable to Class C via Maya



Led Status	
LED Type	2 Internal Multi-Color LED
Solid Blue	Device is connected with Maya App
Flashing Blue	OTA (Over-the-Air) update in progress
Slow Blinking Green	Attempting to connect to the LoRaWAN® network
Single Red Blink	A confirmed parameter of MacSync is being modified

Configuration	
Configuration	Via Macnman Maya Android App
Maya Fatures	Threshold / Trigger / Sample based alarm triggers
Stored Records	30,000 Records (accessible via Maya)
Remote Configuration	Yes - JSON format Data

Physical Characteristics		
Power Supply	Solar Panel (Monocr ystalline) & Inbuilt Batter y	
Solar Panel	Solar Panel (Monocr ystalline)	
	Power : 0.5W to 1 W - 1 2 V	
Operating Temp	- 40° C to +80° C	
Humidity Range	0% to 1 00% RH (non- condensing)	
Ingress Protection	IP 65 standard (IP 67 optional variant)	
Housing Material	Glass Field Nylon	
Color	Matte W hite	
Weight	~440g (with 12Ah battery & without solar panel)	

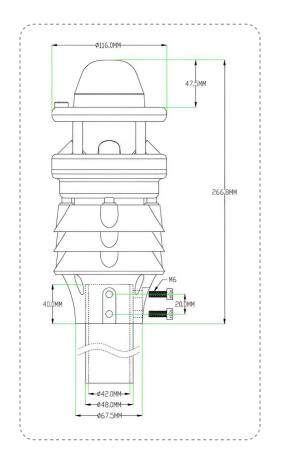


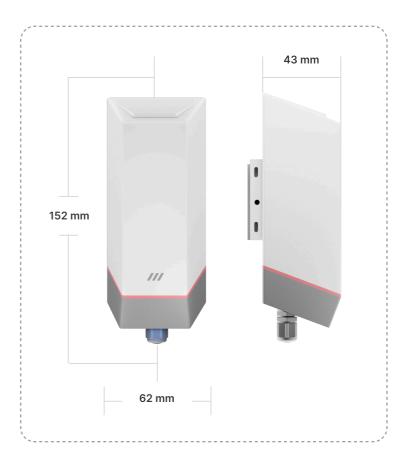
Dimensions	Approx. 152 mm X 62 mm X 43 mm (customizable branding available)
Mounting Options	Standard Product is sleeve fixed
	Fixed Bracket - 1.5 meter or 1.8 meter bracket
Cable	3 meter cable line
IP Rating(MacSync)	IP65

Certifications	
Regulatory	WPC , CE (Sensor)
Environmental	RoHS compliant



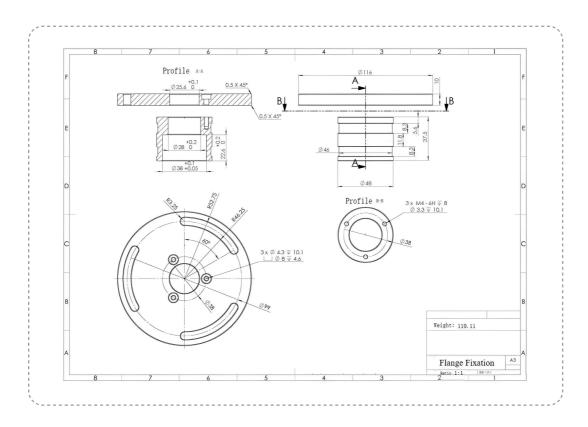
Product Dimension



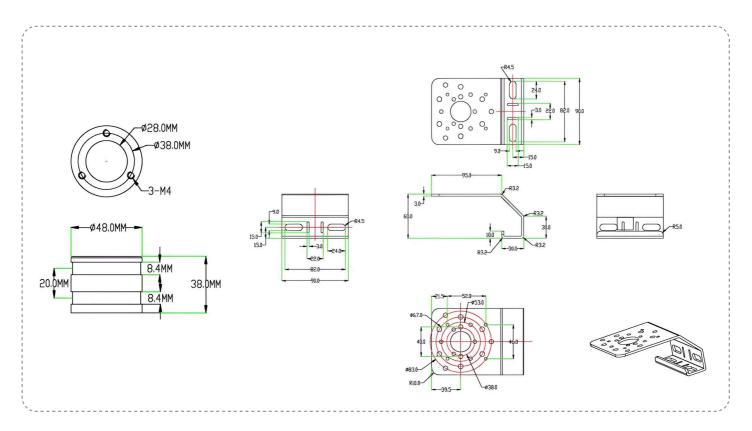


MacSync-LW1 Sensor

MacSync - Standard Version



Flange Mounting Plate



Bending Mounting Plate



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