

MacSync-LD Overview

MacSet Controller is a powerful and reliable RS485-based controller built for industrial and field automation. It works seamlessly with MacSync sensor nodes or any third-party Modbus device. With multiple input options and an integrated relay output, it enables instant actuation based on sensor readings

MacSet is perfect for automated control in irrigation systems, tank level management, motor control, industrial automation, and smart street lighting where sensor-based decisions need direct relay switching.

Interfaces

1 X RS485

2 X Analog

2 X Digital

Digital Output

Wireless Technology



Features

RS485 (Modbus RTU) Interface

Compatible with energy meters, PLCs, Transmitters

4-20 mA , 0-10 V & Digital Inputs

Multiple Analog channels

2 X Relay Output

2 x Relay (SPDT), Max 16 A

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

BLE Support

Easy local configuration and diagnostics with Maya

Massive 19Ah built-in lithium battery

Up to 10+ years depending on settings

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

RS485 Interface	1
4-20 mA Analog Channels	2
0-10 V Analog Channels	2
Digital Inputs	2
Digital Output	2 (Relay SPDT, Max 16 A)
Secure Onboarding	OTAA with AES-128 encryption
ADC Resolution	16-bit

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	1 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 MacSet is being modified

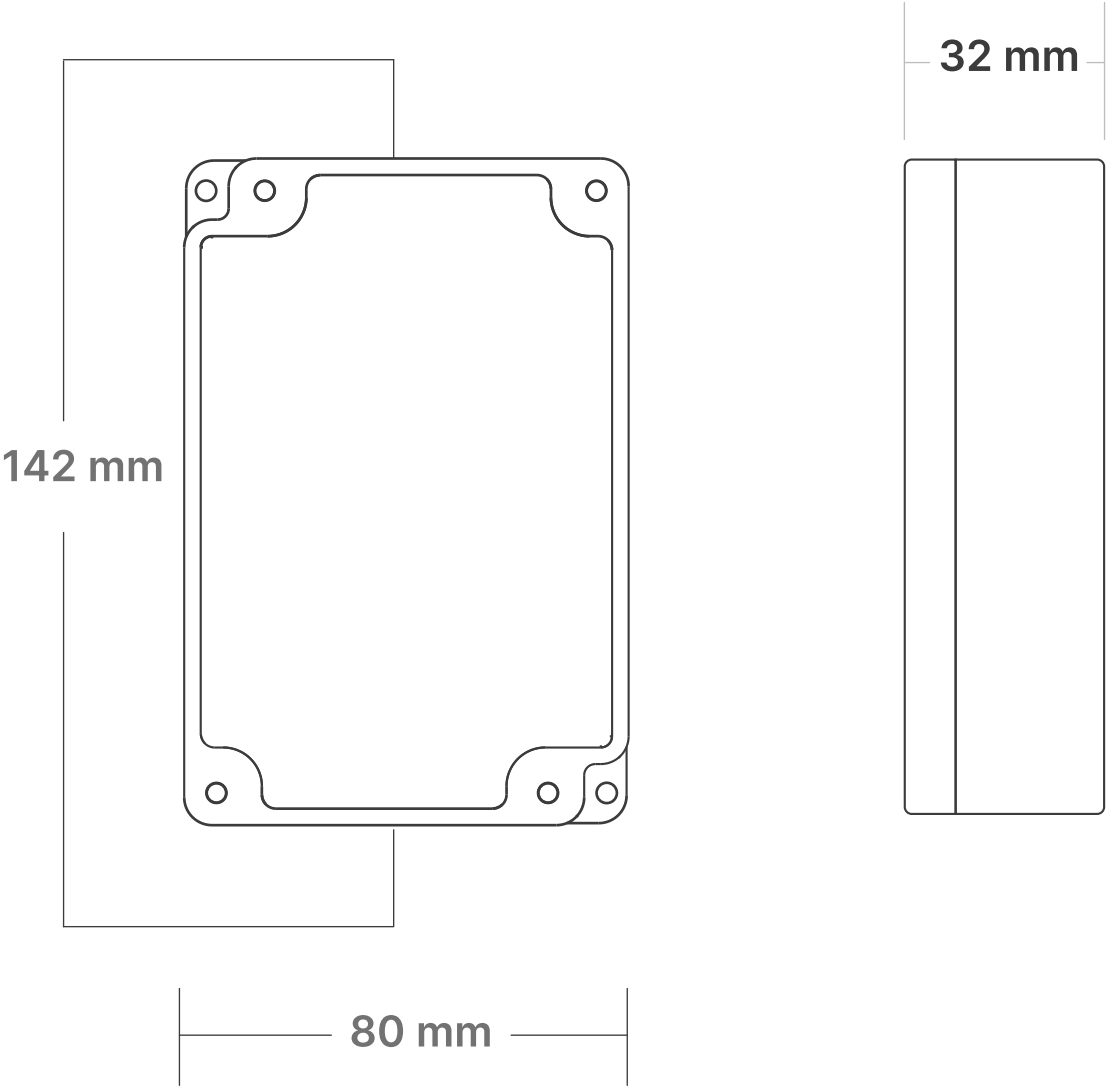
Configuration

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

Physical Characteristics

Power Supply	12-24V , 230 V AC
Operating Temp	-40°C to +80°C
Humidity Range	0% to 100% RH (non-condensing)
Ingress Protection	IP65 standard (IP67 optional variant)
Housing Material	ABS Plastic
Color	Matte White with Transparent Plastic Lid
Weight	~190g
Dimensions	Approx. 142 mm X 80 mm X 32 mm (customizable branding available)
Mounting Options	Pole Mounting / Wall Mounting

Device Dimensions



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