

**Data Sheet** 

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# **RainWise MKIII LR Weather Station Specification:**

The MKIII-LR is a wireless, solar-powered weather station providing the best accuracy of any consumer weather station on the market. This compact, rugged and elegantly designed unit comes fully assembled providing quick and easy installation.

Known for our accurate and reliable sensor assembly, the MKIII-LR has several groundbreaking features including:

1) Transmission range of up to one mile (when positioned with an unobstructed line-of-site view to the receiver) that surpasses the current longrange distance of 1000 feet.

2) Rapid data refresh rate of every 2 seconds makes receiving your data virtually real-time.

3) This unit is available with the option of including our tipping bucket rain gauge - the tipping bucket design was originally developed by RainWise in 1974 and has become the industry standard for rain gauges.



4) Our unique aervane design: others use 3-cup anemometers that are susceptible to collecting water that can cause freezing and breaking, leading to repeated down time and ongoing expensive replacements. Our trademark rotary blade design eliminates this concern. In addition our design utilizes an internal, contact free magnetic system that provides constant horizontal wind tracking, leaving no mechanical parts to wear out over time and require replacement. Finally, our aervane is crafted in such a way as to minimize crevices in the body that would be susceptible to ice build-up causing downtime and breakage.

The MKIII-LR's lightweight and compact design makes installation quick and easy. Various mounting options are available including the RainWise Mono Mount. The MKIII-LR is supplied with a detachable mast section that can be secured to an existing structure.

# Features

- Temperature Sensor
- Humidity Sensor
- Wind Speed sensor
- Wind Direction Sensor



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- Barometer
- Adjustable Solar Panel
- I mile line-of-site transmission
- Optional Rain Gauge
- Optional Solar Radiation
- Optional UV Index
- 2-Year Warranty
- Easy to install
- Solid Construction
- 100% Made in the USA

## **Options for Accessing your Data**

1. The wall mounted or free standing Weather Oracle Multi-Display provides a bright LED readout that can be easily seen from across the room.

2. The IP-100 Network Interface allows for multiple display options including our RainwiseNet<sup>™</sup> cloudbased data host and web portal page and our iPhone & iPad apps.

3. The CC-3000 Computer Interface allows for computer display and data storage with the included 3rd party weather viewing software (options available for both PC and Mac platforms).

4. Integrates with SiteSage dashboard

#### **Specifications**

Power Specification: 6V 5AH AGM Sealed Lead Acid, 0.6W Solar Panel

Operating Environment:

Temperature:  $-40 \sim 60^{\circ}$ C

Humidity: 0 ~ 100% Condensing

Ambient Air Temperature Sensor:

Range: 60°C

Accuracy:  $\pm 0.2^{\circ}C$  at  $25^{\circ}C$ 

Resolution: 0.1°C



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#### Relative Humidity:

Range: 0 ~ 100%

Accuracy:  $\pm 2\%$  for  $10 \le \%$ RH  $\le 90$  at  $25^{\circ}$ C

Resolution: 1%

Long Term Drift: <0.5%/Yr

#### Barometric Pressure:

Range: 300 ~ 1100 mbar

Accuracy:  $\pm 0.5$  mbar between 700-1100 mbar at 25°C

Resolution: 1 mbar

Long Term Drift: -1 mbar/Yr

## Liquid Precipitation:

Range: 0 ~ 762 mm/hr

Accuracy: ±2% at 25.4 mm./hr x 3

Resolution: 0.254 mm.

## Wind Direction:

Range: 0 ~ 360°

Accuracy:  $\pm 3^{\circ}$ 

Resolution: 1°

#### Wind Speed:

Range: 0 ~ 67 m/s

Accuracy: Greater of 0.45m/sec.or 5% of Reading

Resolution: 1 m/s

Threshold 0.45 m/s at a 10° Deflection

#### Radio Transmitter

2.4GHz

Outdoor Line-of-Sight Range: Up to 1600 m, up to 750 m EU Variant Transmit Power Output: 18dBm, 10 dBm for EU Variant Operating Frequency: ISM 2.4GHz



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#### 418/433MHz

Outdoor Line-of-Sight Range: Up to 122 m

Transmit Power Output: 0dBm

Operating Frequency: 418MHz, 433MHz

Electronics: Lead-free RoHS Compliant

# Physical:

Packaged Dimensions: 91.44 cm x 50.8 cm x 33.02 cm (36" x 20" x 13")

Packaged Weight: 9.07 kg (20 lbs.)

# Warranty

2 Years