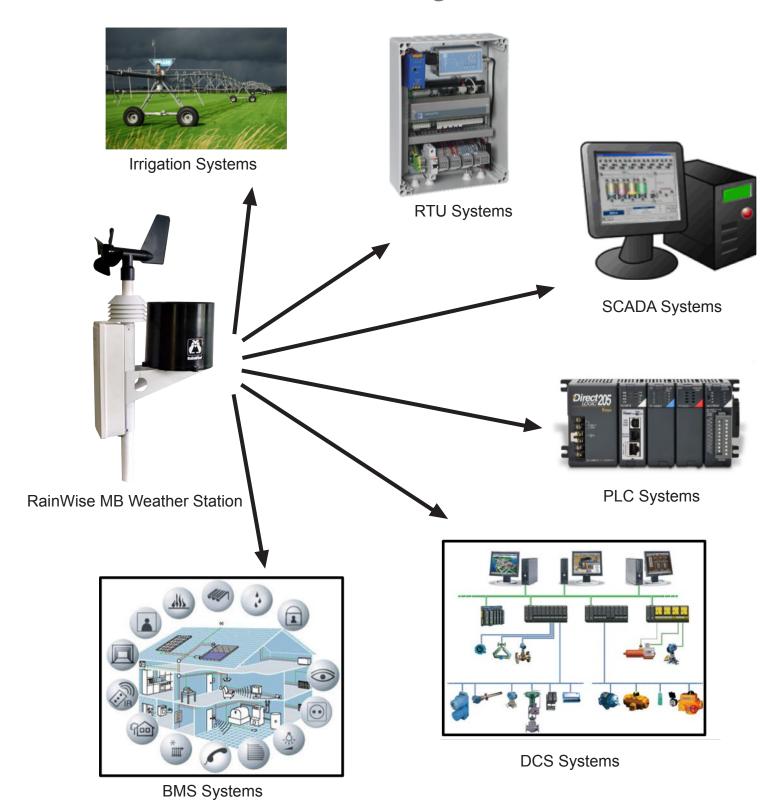
# Plug & Play Modbus/RS485 Connectivity

for Commercial Monitoring and Maintenance!



# **Commercial Meteorological Stations**

Weather Stations for Industrial, Agricultural and Building Control Systems
Using Modbus/RS485 Connectivity



The RainWise MB series of fully assembled, compact wired weather stations offer an economical option for many Industrial applications. Equipped with the Modbus RTU interface, the RainWise MB line easily integrates with building automation, large argricultural operations, and industrial control systems. Based on the popular RainWise MK-III wireless sensor assembly, parameters include: wind speed, wind direction, barometric pressure, humidity, temperature, rainfall. Leaf wetness and solar radiation are available in the agricultural model.

The RainWise MB series provides instantaneous, on-site weather data for operational decisions in public safety and industries affected by weather conditions. All sensor measurements meet the exacting requirements of users in demanding applications where cost, quality and performance are essential.

### **Every model in the RainWise MB line offers:**

Efficient Operation

Rugged, Compact Design

### 3 Models & Upgrades Available

- Fully assembled and factory calibrated
- Easy set-up
- Accurate weather sensors for efficiency monitoring
- Operates over a broad range of temperatures

- Durable & weather resistant
- Ultra-violet inhibited
- Stainless steel hardware
- Optional add-on sensors
- 2 year warranty with optional upgrade to 5 year warranty

Easy integration to most SCADA, BMS, DCS and PLC environments via Modbus RTU interface using RS-485



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# MK-III-RTI-MB



### The Professional All-Purpose Compact Weather Station

- Wind Speed
- Wind Direction
- Ambient Temperature
- Relative Humidity
- Barometric Pressure
- Rainfall

#### Optional Upgrades:

- Industrial Aluminum Rain Gauge (Heated upgrade available with 120V/240V)
- Solar Radiation
- UV Index
- 1 degree Wind Sensor
- PV/Battery powered station (MK-III-RTI-MBS) upgrade available!

# **MK-III-MB-US**



### The MK-III-RTI-MB Upgraded with an Ultra Sonic Anemometer

Upgraded with a high precision Ultrasonic Anemometer for wind speed & direction. The Ultra Sonic Sensor has no moving parts which enhances sensor durability & practically eliminates maintenance. Marine grade corrosion free construction.

- Wind Speed via Ultra Sonic Sensor
- Wind Direction via Ultra Sonic Sensor
- Ambient Temperature
- Relative Humidity
- · Barometric Pressure
- Rainfall

### Optional Upgrades:

- Industrial Aluminum Rain Gauge (Heated upgrade available with 120V/240V)
- Solar Radiation
- UV Index

# **AgroMET-MB**



### **Enhanced with Agricultural Specific Sensors**

- Wind Speed
- Wind Direction
- Ambient Temperature
- Relative Humidity
- Barometric Pressure
- Rainfall
- Leaf Wetness
- Solar Radiation

#### Optional Upgrades:

- Industrial Aluminum Rain Gauge (Heated upgrade available with 120V/240V)
- Soil temperature
- Soil Moisture
- PV/Battery powered station (AgroMET-MBS) upgrade available!

### **Optional for all models:**

Ethernet Modbus TCP via 3rd party devices, Connectivity to <u>rainwise.net</u> online and Weather Underground's Personal Weather Station Network online portals via 3rd party Ethernet gateway, and BACnet support via 3rd party devices.

# The Perfect Solution for Modbus Based Environments

The RainWise MB line enables easy connectivity of our premier weather stations to any system supporting the industry standard Modbus protocol. Seamlessly communicating with either a remote programmable controller or integrated control system, the RainWise MB line of stations provide crucial environmental data needed to monitor and carry out actions based on meteorological conditions such as wind speed, wind direction, temperature and many other weather based variables. Optional NIST certification of sensors is also available.

Typical Modbus based systems include:

- PLC's (Programmable Logic Controller)
- RTU's (Remote Telemetry Unit)
- SCADA (Supervisory Control and Data Acquisition) Systems
- DCS (Distributed Control System)
- BMS (Building Management System)
- Agricultural Irrigation Systems

For industrial and building automation applications either the RainWise MK-III-RTI-MB station or MB-US station (with Ultra Sonic, maintenance-free wind technology) offer the desirable selection of sensors. The RainWise AgroMET-MB station is a perfect fit for bigger scale growing and irrigation management solutions that require data based on soil moisture, rainfall & relative humidity. For applications where power is not available, the MK-III-RTI-MBS and the AgroMET-MBS stations offer a PV/Battery powered alternative.

# Examples of applications for RainWise MB weather stations

### **Building Management Systems**

Intelligent building management, heating ventilation and air conditioning (HVAC), environmental monitoring, pollution control, risk mitigation, and resources management.

### <u>Transportation & Environment Usage and Safety Monitoring</u>

Roadways, airports, bridges, railways, harbours, flood management, marine safety, mass transit, broadcast meteorology, parks and recreational facilities, waste management, fire prevention, scaffold and crane safety, and utilities risk management.

### **Agricultural & Alternate Energy Management and Research**

Crop spraying, irrigation systems, greenhouse controls, hydroponics, pest control, forecasting, forestry services, solar and wind monitoring.

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