WATERMARK Electronic Module – Battery Version — WEM-B

Specifications –

COMPATIBILITY: The WEM-B is compatible with battery powered (DC) irrigation valve/controllers and requires a "sensor" port or wire connection on the irrigation controller. It will work with normally open or normally closed switch requirements. The WEM-B can be used in combination with other climatic sensors (rain, freeze, etc.).

Note: The WEM-B provides a dry contact switch closure at a reference moisture level for other control applications such as alarms, signaling, etc. Please contact IRROMETER for more details.

POWER REQUIREMENTS: Input voltage – Self powered 9 VDC internal battery.

MATERIALS: ABS plastic case with encapsulated electronics for outdoor operation. Water resistant battery compartment is sealed with thermo plastic rubber plug.

DIMENSIONS:

HEIGHT: 1.50 in. (38 mm) – 2.5 in. (64 mm) including mounting tabs
WIDTH: 2.625 in. (67 mm)
DEPTH: 2.0 in. (51 mm) including knob
WEIGHT: 11.3 oz. (320 g)
WIRE LEADS: 20 AWG x 12 in. (30 cm)

5 leads – 2-sensor, 3-switch (normally open/closed)

SETTINGS: Off and 1 (wet) through 9 (dry)

200SS-5 Sensor

Specifications –

MATERIALS: ABS plastic caps with stainless steel body over a hydrophilic fabric covered granular matrix with embedded stainless steel electrodes.

DIMENSIONS –

DIAMETER: .875 in. (22 mm)
LENGTH: 3.00 in. (76 mm)
WIRE LEADS: 20 AWG x 5 ft. (1.5 m) — two (2) leads

ORDERING INFORMATION: Catalog #WEM-B — WATERMARK Electronic Module - Battery Version includes – one WEM-B module, two 200SS-5 sensors and instructions in a clear plastic display package.

WARRANTY: One year

The WEM-B works with an existing battery operated valve/controller to improve irrigation efficiency based on plant demand. The module will prevent irrigation cycles by signaling the controller’s sensor circuit when the soil moisture status is wetter than the adjustable set point. The kit includes two moisture sensors. This allows for multiple placement locations, thereby averaging the soil moisture status over a larger area or over deeper root depths. Nine moisture set points allow for a wide range of variations in plant and soil type. An indicator light flashes when the unit is in operation.

Features:

- Works with any battery powered (DC) valve/controller equipped with a sensor circuit
- Suspends irrigation cycles based on soil moisture status
- Easy to install and use
- Nine position switch for variations in plant demand and soil type
- Requires no seasonal adjustments

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OPERATING PRINCIPLE: The WATERMARK Electronic Module-Battery Version is a self powered device that is designed to work in conjunction with a battery powered (DC) irrigation valve/controller equipped with a sensor circuit. The device will suspend irrigation when soil moisture status is appropriate for good plant health. The included WATERMARK soil moisture sensors are placed in the root zone of the plant material being irrigated and wired to the WEM-B. Every few minutes the WEM-B interrogates the sensors for soil moisture status. The module will prevent operation of the irrigation valve/controller when soil moisture levels are wetter than desired thresholds. The module shall interpret sensor readings and prevent operation of the irrigation valve/controller when soil moisture levels are wetter than desired thresholds. The module shall provide nine adjustment levels to accommodate plant type and soil variances. This device shall be the WATERMARK Electronic Module - Battery Version as manufactured by the IRROMETER Company, Inc. of Riverside, California.
Shown here installed with Hunter valve/controller

WEM-B can be used in combination with other sensors (rain, freeze, flow, etc.) by wiring all switches in series on the controller’s sensor circuit.

Notes:
1. Locate sensors at appropriate depths for plant material.
2. Make all wiring connections using waterproof connectors.
3. Replace 9 volt alkaline battery annually.
4. Set to OFF position for manual operation or maintenance.