



OMC-210-2 Rain Gauge at ground level or optional stand

Datasheet

OMC-210-2 Rain Gauge

The OMC-210-2 is a tipping bucket rain gauge and is used to measure rainfall. It is designed and constructed for long-term operation with minimal maintenance under almost all climatic conditions. All materials used are corrosion resistant.

Applications

- General meteorology
- Water resources studies
- Hydrology
- Flood warning systems
- Automatic logging systems
- Remote and long term logging deployments

Features

- Rugged and corrosion resistant construction
- Low friction, non-seizing bucket bearings
- Gold plated bucket for minimal retention
- Dual reed switch output
- Stable calibration
- Built-in bubble level
- Optional self-powered internal counter
- Optional internal datalogger
- Optional heating (OMC-212-2)

General

The measurement principle is based on a 'tipping bucket'. Each tip is detected by a magnet briefly closing a Reed contact.

The OMC-210-2 may be mounted at ground level on a level slab or on the optional stand which elevates the collection rim to 1 meter above ground level.

The rain gauge does not need power. The 'tips' (closures of the Reed contacts) can be counted by an optional counter or data logger.

The OMC-210-2 rain gauges can also be supplied with siphon control which is better suited to heavy rainfall areas. A heated version, the OMC-212-2, is also available.

Data logger Option OMC-042 with GPRS modem installed within the body of the rain gauge.

Counter Option Liquid Crystal 6 Digit Counter (self powered) installed within the body of the rain gauge (P/N 7499 LCD)

Ordering information

- OMC-210-2-01 0.1 mm bucket
- OMC-210-2-02 0.2 mm bucket
- OMC-210-2-05 0.5 mm bucket

Options

- 8400TCH Thermostatically controlled heater.
- 8000PED1 Rain gauge stand 1m to suit OMC-210-2 (collection rim is 1m above ground level)
- 8000PEDx.x Rain gauge stand x.xm to suit OMC-210-2 (collection rim is x.xm above ground level)
- 8000BG1 Bird Guard – clamp on version
- OMC-042 data logger
- 7499 LCD Counter

Specification

Collector surface

- 400 cm² ± 1 cm²

Resolutions

- 0.1 mm, 0.2 mm and 0.5 mm

Accuracy 0.1 mm version

- ± 3% over 25 mm/hr to 100 mm/hr
- ± 4% to 200 mm/hr
- ± 7% to 500 mm/hr

Accuracy 0.2 and 0.5 mm versions

- ± 3% over 25 mm/hr to 200 mm/hr
- ± 6% to 500 mm/hr

Contacts

- Two normally open magnetically actuated reed switches
- Reed Switch Rating 50V ac/dc at 0.5A non-inductive.
- Closure Timing 50 ms min and 150 ms max, max bounce time 0.75 milliseconds up to 350 mm/hr
- Termination Screw termination (2.5 mm²) on the Reed Switch Holder

Dimensions 340 mm height incl. adjusting bolt, 238 mm collection rim outer diameter, 238 mm body diameter and 290 mm footprint diameter

Physical 4.0 kg net, 7.0 kg shipping weight, 7.0 kg cubic (airfreight) weight, Standard shipping carton 315 mm x 315 mm x 420 mm nominal

Temperature Operating 0° to +50°C

Storage -10° to +60°C

Humidity Operating <10% to 100%

Precipitation Operating: heavy rain, hail or snow Storage: accumulation of up to 15 mm of freezing precipitation accompanied by wind gusts of 100 km/hr

Vibration Operating high, consistent with high winds

Storage high, consistent with shipping and handling

Heated version Refer to OMC-212-2 data sheet

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