

RAIN GAGE & BAROMETRIC PRESSURE MONITORING

DATASHEET

MODEL ERG-160
and ERG-200/201



OVERVIEW

The Encardio-rite ERG-200/201 Rainfall & Barometric Pressure Monitoring System is a robust, precision-engineered solution for unattended measurement of rainfall and barometric pressure in hydrological, geotechnical, and environmental projects.

The ERG-200/201 rain gauge uses a proven tipping bucket mechanism inside a corrosion-resistant stainless steel housing. Rain is collected through a 200 mm catchment with a debris screen and directed into one of two balanced buckets. When full, the bucket tips, empties automatically, and repositions the other bucket to continue measurement. Each tip activates a sealed magnetic switch, recording 0.2 mm (ERG-200) or 0.5 mm (ERG-201) of rainfall. Adjustable screws ensure precise calibration.

High sidewalls prevent splash-out for greater accuracy. Each unit is individually calibrated and mounted securely with adjustable legs. The system integrates with ESCL-10VT-BX and ESDL-30 dataloggers, which include an internal barometric pressure sensor for accurate correlation of rainfall and pressure — useful for weather studies and flood monitoring.

Data can be logged at set intervals and accessed locally via laptop or smartphone, or remotely via GSM/GPRS telemetry. Encardio-rite's cloud service offers secure data archiving and worldwide access to tables and graphs through any web browser.

For simple manual readings, the ERG-160 mechanical rain gauge (IS 5225-1992) is available in 159.6 mm and 200 mm diameters. It uses a container and graduated flask for accurate manual measurement.

With rugged construction, precise measurement, integrated barometric logging, and flexible data access, the ERG-200/201 and ERG-160 provide a dependable solution for rainfall and barometric pressure monitoring in any environment.

FEATURES

- **Simultaneous monitoring:** Measures both rainfall and barometric pressure in real-time.
- **Proven tipping bucket design:** Balanced tipping bucket mechanism ensures high measurement accuracy.
- **Durable construction:** Stainless steel housing resists corrosion, ensuring years of trouble-free operation.
- **Flexible data logging:** Compatible with Encardio-rite ESCL-10VT-BX and ESDL-30 dataloggers.
- **Remote access:** Retrieve and manage data via GSM/GPRS telemetry, laptop, PC, or Android smartphone.
- **Easy installation & maintenance:** Adjustable legs for secure mounting and hassle-free calibration.
- **Barometric pressure sensor:** In-built sensor in datalogger for barometric correction, ensuring accurate readings.

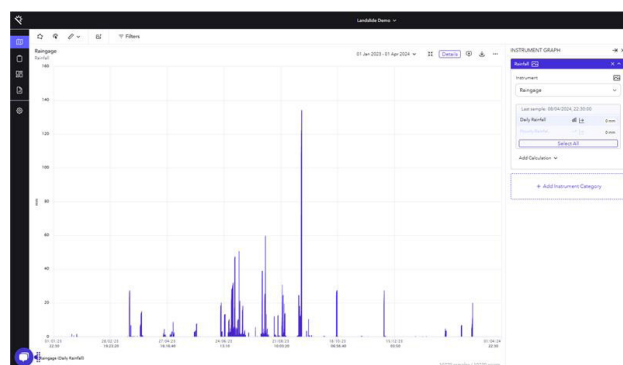
SPECIFICATIONS

Sensor Type	Tipping bucket
Output	Potential free contact, one momentary switch closure per tip
Tip sensor	Sealed magnetic proximity switch
Resolution	0.2mm/tip for model ERG-200 0.5 mm/tip for model ERG-201
Accuracy	± 2 % at around 30 mm/hour ± 5 % at around 120mm/hour
Operating temp.	Up to 50°C
Humidity	0 to 100%
Catchment area	200 mm diameter
Construction	Corrosion resistant stainless steel outer housing
Data retrieval/ transmission	GSM/GPRS telemetry link, laptop/PC, Android smart phone
Barometric pressure	Range: 950 – 1050 hPa Accuracy: ± 2hPa

*All specifications are subject to change without prior notice

Infrastructure data intelligence platform (Proqio): Transmit data to a local or cloud server hosting the Proqio platform for 24/7 insights. Proqio enables efficient data processing, analysis and real-time visualization. Benefit from instant alerts for critical events and automated reports, supporting informed decision-making.

Also compatible with any manufacturer's data management system for continuous monitoring



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