Datasheet

RAIN GAUGE

The Tipping Bucket Rain Gauge represents the pinnacle of precipitation measurement technology, delivering exceptional accuracy and reliability in rainfall monitoring. This precision-engineered instrument employs an advanced balanced tipping mechanism to provide continuous, high-fidelity rainfall data collection for meteorological applications, hydrological research, and environmental monitoring programs. Constructed with durable, weather-resistant materials, the gauge maintains measurement integrity even under extreme environmental conditions.

Designed for seamless integration with modern data acquisition systems, this rain gauge features plug-and-play compatibility with data loggers and remote monitoring platforms, enabling real-time precipitation analysis and informed decision-making. The innovative quick-release maintenance system provides effortless access to internal components, significantly reducing service time and ensuring optimal long-term performance.

Key Features

- **Precision Measurement**: Balanced tipping bucket mechanism ensures laboratory-grade accuracy
- **Maintenance Optimized**: Minimal moving parts design enhances reliability and reduces servicing requirements
- **Advanced Sensing**: Magnetic reed switch technology for precise tip detection
- **Intensity Compensation**: Maintains accuracy across varying rainfall rates
- **Weather-Resistant Construction**: Durable ABS housing withstands harsh environmental conditions
- **System Integration**: Direct compatibility with data loggers and automated weather stations
- **User-Centric Design**: Quick-release fasteners for simplified maintenance procedures

Technical Specifications

Parameter	Specification
Instrument Type	Precision Tipping Bucket Rain Gauge
Orifice Diameter	159.5 mm or 200 mm (configurable)
Collector Area	200 cm^2 or 314 cm^2 (selectable)
Sensing Technology	Magnetic reed switch detection

RAIN GAUGE

Parameter	Specification
Measurement Range	Up to 150 mm/hour rainfall intensity
Response Capability	1 pulse per second maximum operation rate
Measurement Resolution	0.2 mm or 0.5 mm per tip (configurable)
Output Signal	Reed switch pulse count
Measurement Accuracy	±2% (traceable calibration)
Construction Material	UV-stabilized ABS polymer
Leveling System	Adjustable leveling screws with integrated spirit level
Debris Protection	Integrated stainless steel mesh filter system

Enclosure & Mechanical Specifications

Characteristic	Specification
Body Material	Weather-resistant ABS polymer
Protection Rating	IP65 environmental protection
Color	Solar-reflective white
Mounting System	Adjustable base with secure mounting provisions
Maintenance Access	Quick-release fasteners for internal component access

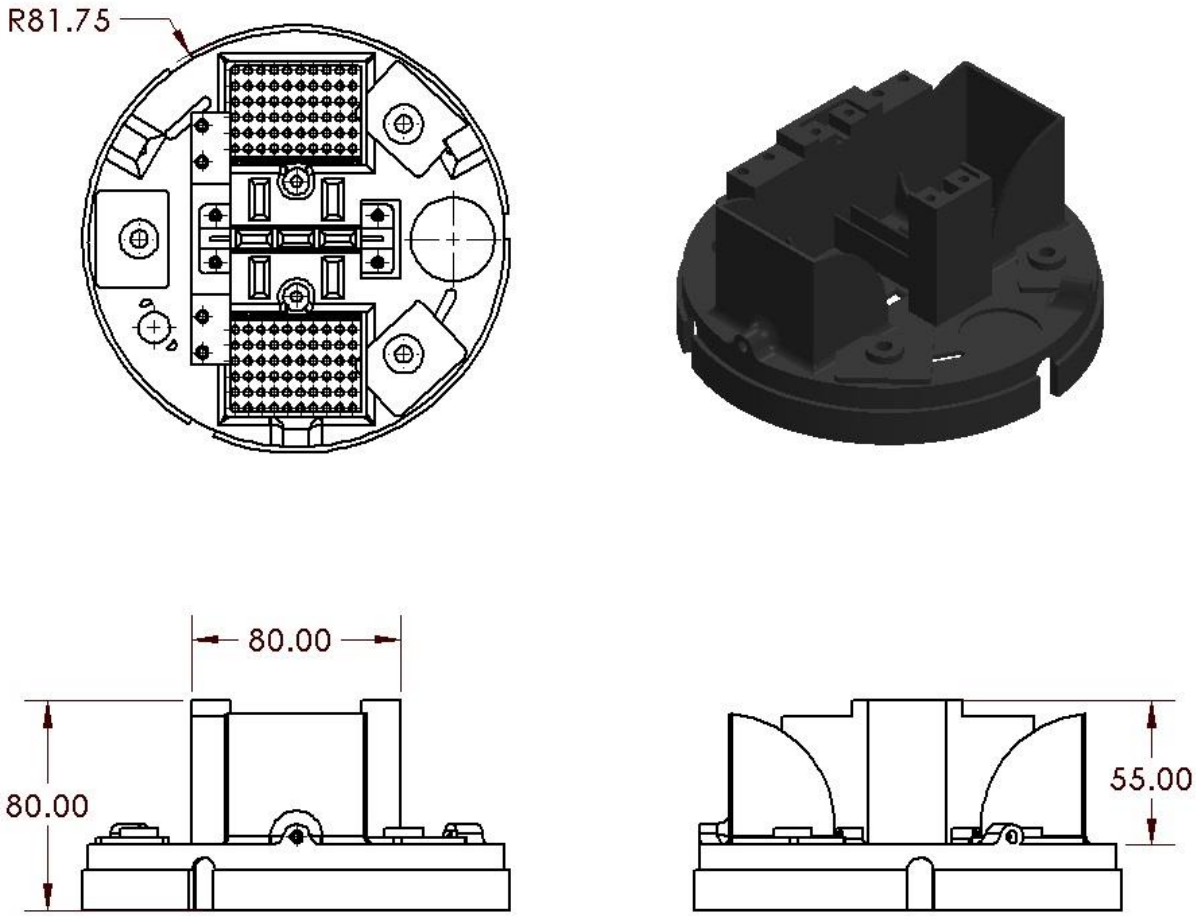
Applications

- **Meteorological Monitoring**: Professional weather station precipitation measurement
- **Agricultural Management**: Irrigation planning and crop water requirement assessment
- **Hydrological Research**: Watershed analysis and rainfall pattern studies
- **Environmental Science**: Climate change research and environmental impact assessment
- **Civil Engineering**: Urban drainage design and flood prediction systems
- **Educational Institutions**: Atmospheric science research and teaching applications

RAIN GAUGE

Quality Assurance

- Factory calibrated with traceable certification
- Compliance with international meteorological standards
- Environmental testing for temperature and humidity extremes
- Vibration and shock resistance validation
- Long-term durability testing for UV and weather resistance

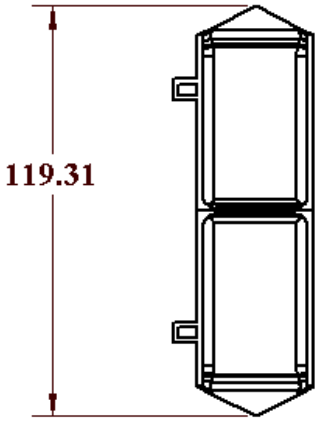


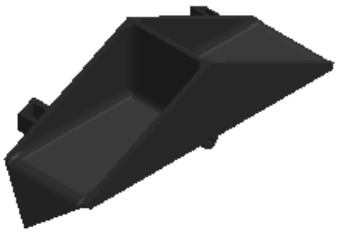
Rain Gauge Base

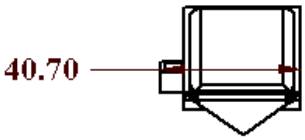
(All The Dimensions are n mm)

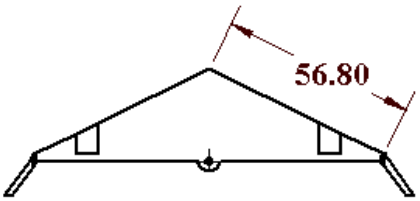
Datasheet

RAIN GAUGE







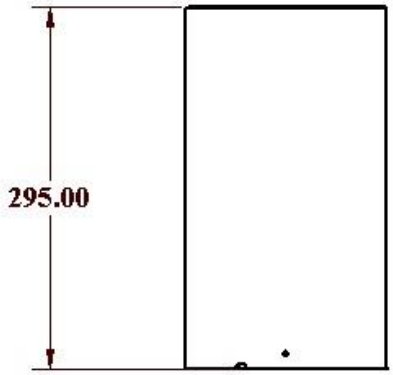


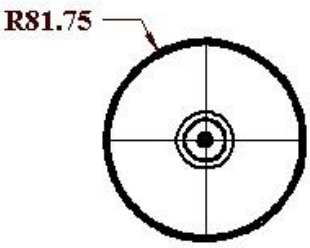
Rain Gauge SeeSaw

(All The Dimensions are in mm)

Datasheet

RAIN GAUGE





Rain Gauge Cylinder

(All The Dimensions are in mm)