

# Every Drop Matters

Unlock Exceptional Accuracy and Versatility  
with Our Outstanding Rainfall Sensor System 5.4041



## ① One Drop Resolution

High resolution 0.001mm  
1 ml/sqm Which is  
equivalent to 1 drop in  
terms of the collection area

## Quantity

Instantaneous, average,  
precision 0.001 mm/min; 0,06 mm/h  
range 0.005mm- ∞  
precision 1%

## Intensity

Instantaneous, average,  
minimum, maximum,  
range 0-20 mm/min | 0-1200 mm/h

## Variance

Variance of measured  
values over 4 s

## Heater

Operating temperatures  
of -40 ... 70 °C  
(optional)

## Output

RS-485  
ASCII  
MODBUS-RTU  
Pulse output

# DROP, DROP, DROP ...

The precipitation transmitter  
measures rainfall quantity  
and intensity with  
unparalleled precision.

By combining cutting-edge weighing technology with a self-emptying collection system, it achieves exceptional accuracy in a compact design. Unlike traditional systems, it utilizes a combination of a high-precision weighing cell with overload protection and a well-proven tipping bucket mechanism. Error correction is achieved by real-time processing of the tipping bucket pulses, and the self-emptying mechanism without a tank ensures uninterrupted weighing.

THE WORLD OF WEATHER DATA



# Precipitation Measuring Technology Precipitation Transmitter 5.4041

The instrument combines cutting-edge weighing technology in a very small space with a self-emptying collection vessel. The system provides excellent resolution and high precision. The weighing precipitation transmitter is suited for use in meteorological and hydrological monitoring networks as well as applications in the area of environmental monitoring. Modbus RTU-interface facilitates installation of the sensor and its easy integration into networks. The device is WMO-compliant and is equipped with interfaces which are compatible with sensors with tipping bucket models or weighing systems. Other features are the compact, robust design, a very low weight, stainless steel housing, weather resistance and longevity. High connectivity is ensured by multiple interfaces as well as easy installation and maintenance.

Meteorology

Climatology

Hydrology

Industry | Monitoring

- Specifications**
- Collecting area: 200cm<sup>2</sup>
  - Resolution: 0.001mm (pulse output: 0.01mm)
  - Meas. principle: Weighing with automatic self-emptying function
- Range**
- Intensity: 0 ... 20mm/min or 0 ... 1200mm/h
  - Quantity: 0.005mm- ∞ unlimited
- Accuracy**
- Intensity: 0.001mm/min
  - Quantity: 0.1mm or 1%
- Output:** RS-485, ASCII, MODBUS-RTU, pulse output
- Electronic:** 10 ... 32V DC / 1W
- Heating (option):** 24V DC, 140W
- General:** -40 ... +70°C (with heating)
- Mounting:** at mast tube Ø 60mm
- Protection:** IP 67
- Dimension:** 292mm x 190mm (H x D)
- Weight:** Approx. 2.7kg
- Housing:** Stainless steel
- Compliant:** WMO - No.8, VDI 3786



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