

Every Drop Matters

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



1 One Drop Resolution

High resolution 0.001 mm
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 0.005 mm- ∞
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: 200cm²
 - 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

For more information, please feel free to contact us:

 Phone: 49.551 790010
info@thiesclima.com

[More details >](#)

