



Weighing rain gauge with automatic drain

- **Parameters measured**
Precipitation intensity and amount in real-time from 0.001 to 720 mm/h
- **Measurement technology**
Weighing principle with Tipping Bucket
- **Product Highlights**
Continuous and consistent rain monitoring technology with cumulative data output according WMO guide line No 8
- **Interface**
SDI-12 / RS-485, pulse, analog output

The OTT WAD 200, a weighing technology combined with a self-emptying weighing rain sensor, is specially designed for the use in subtropical and tropical climates. The highly sensitive measuring principle of the precipitation meter meets the requirements of the WMO guidelines and delivers accurate measured values in real time for both quantity and intensity of liquid precipitation in the range of 0.001 to 720 mm/h.

The rain gauge has a low power consumption and is an accurate measuring instrument even under extreme weather conditions. A usually prescribed annual calibration can be carried out with the aid of a reference weight and is therefore more accurate than the usual calibration procedure using water volume.

Ambient relative humidity	0 ... 100 % RH
Protection class	Load cell: IP 67 / instrument: IP 64
Wind Speed Survival	60 m/s

Technical Data

OTT WAD 200 - Weighing Rain Gauge

General Data

Recordable precipitation	Liquid
Collecting area	200 cm ²
Capacity	0.2 mm bucket, self-emptying
Sensor type	Weighing precipitation gauge
Sensor element	Hermetic sealed load cell

Measuring range

EMC/EMI and Norms

EMC/EMI	EN 61000-4-3, CE conform
RoHS	2011/65/EU
Norms	WMO-No 8, VDI 3786 Bl. 7
Precipitation	0.001 to 720 mm/h (28 inches/h)
Resolution	0.001 mm / 0.001 mm/h (0.00004 inches)
Accuracy	± 0.1 mm or ± 3% ± 0.1 mm / min ± 6mm/h or ± 3 %

Electrical parameters

Electronics	9.8 to 32 VDC / 160 mW (SDI-12 & pulse output)
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Interfaces

USB	Configuration / Service-Mode
Serial interface	SDI-12 / RS-485 2-wire
Baud rate	1200 (SDI-12) / 2400 to 19200 baud (RS485)
Pulse output	0.01 / 0.1 / 0.2 / 0.5 / 1.0 mm
Status output	Rain yes/no
Analogue output	0/4 ... 20 mA or 0 ... 2/5 V

Data output

Real time (RT)	Intensity & cumulative precipitation
Status	Operational mode, hardware
Output interval	1 min (intensity) / 1 to 60 minutes
Output formats	SDI-12 V1.3 : metric & imperial units / RS-485 (galvanic isolated): ASCII.TXT and MODBUS

Mechanical parameters

Dimension (Ø x h)	292 mm x 190 mm
Weight	2.5 kg

Material

ring, funnel, plate	Aluminum alloy
Load cell	Stainless steel
Bucket	Monolithic
Mounting/Installation Ø	2" / 60mm

Environmental conditions

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OTT Hydromet GmbH, Germany

Technical Data

OTT WAD 200 - Weighing Rain Gauge



Operating temperature	0 ... +70 °C
Storing temperature	-50 ... +70 °C

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