



### 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 200/314, 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 200/314 - Weighing Rain Gauge

General Data	
Recordable precipitation	Liquid
Collecting area	200 cm <sup>2</sup> / 314 cm <sup>2</sup>
Capacity	0.2 mm bucket, self-emptying
Sensor type	Weighing precipitation gauge
Sensor element	Hermetic sealed load cell
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## 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 %
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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
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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
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Mechanical parameters	
Dimension WAD 200	292 mm x 190 mm (Ø x h)
Dimension WAD 314	311 x 256 mm (Ø x h)
Weight WAD 200	ca. 2.5 kg
Weight WAD 314	ca. 4,0 kg
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We reserve the right to make technical changes and improvements without notice. V-21/05/2019  
OTT Hydromet GmbH, Germany

# Technical Data

OTT WAD 200/314 - Weighing Rain Gauge

Material	
ring, funnel, plate	Aluminum alloy
Load cell	Stainless steel
Bucket	Monolithic
Mounting/Installation Ø	2" / 60mm
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Environmental conditions	
Operating temperature	0 ... +70 °C
Storing temperature	-50 ... +70 °C