

# Technical Data

OTT WAD 200/314 - Weighing Rain Gauge - discontinued



## Weighing rain gauge with automatic drain

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

The OTT WAD 200/314 combines the advantages of a tipping and weighing system and 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.

| General Data   |                              |
|----------------|------------------------------|
| Sensor type    | Weighing precipitation gauge |
| Sensor element | Hermetic sealed load cell    |

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We reserve the right to make technical changes and improvements without notice. V-08/12/2024  
 ADCON Telemetry, Austria



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|                     |   |
|---------------------|---|
| Precipitation Types | Liquid                                    |
| Collecting area     | 200 cm <sup>2</sup> / 314 cm <sup>2</sup> |
| Capacity            | 0.2 mm bucket, self-emptying              |

|                        |                                     |
|------------------------|-------------------------------------|
| <b>Measuring range</b> |                                     |
| Amount                 | Without limitation (0.005 ... ∞ mm) |
| Intensity              | 0 ... 10 mm/min resp. 6 mm/h        |

|                   |                               |
|-------------------|-------------------------------|
| <b>Resolution</b> |                               |
| Amount            | 0.001 mm                      |
| Intensity         | 0.001 mm/min resp. 0.001 mm/h |

|                 |                                      |
|-----------------|--------------------------------------|
| <b>Accuracy</b> |                                      |
| Amount          | ±0.1 mm or ±2 %                      |
| Intensity       | ±0.1 mm/min resp.; ±6 mm/h oder ±2 % |

|                              |   |
|------------------------------|---|
| <b>Electrical parameters</b> |   |
| Electronics                  | 9.8 to 32VDC / 160 mW (SDI-12 & pulse output) |

|                   |  |
|-------------------|--|
| <b>Interfaces</b> |  |
| USB               | Configuration / Service-Mode               |
| Serial interface  | SDI-12 or RS485 2-wire                     |
| Baud rate         | 1200 (SDI-12); 2400 to 19200 baud (RS-485) |
| 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               |

|                    |  |
|--------------------|--|
| <b>Data output</b> |  |
| 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 |

|                              |  |
|------------------------------|--|
| <b>Dimensions and Weight</b> |  |
| Dimension (Ø x h)            | WAD 200: 292 x 190 mm; WAD 314: 311 x 256 mm |
| Weight                       | WAD 200: ca 2,5 kg; WAD 314: ca. 4,0 kg      |

|                         |                 |
|-------------------------|-----------------|
| <b>Material</b>         |                 |
| Ring, funnel, plate     | Aluminum alloy  |
| Load cell               | Stainless steel |
| Bucket                  | Monolithic      |
| Mounting/Installation Ø | 2□/ 60mm        |

|                                 |              |
|---------------------------------|--------------|
| <b>Environmental conditions</b> |              |
| Operating temperature           | 0 ... +70 °C |

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|                           |                                      |
|---------------------------|--------------------------------------|
| Storing temperature       | -50 ... +70 °C                       |
| Ambient relative humidity | 0 ... 100% RH                        |
| Protection class          | Load cell: IP 67 / instrument: IP 64 |
| Wind Speed Survival       | 60 m/s                               |

| EMC/EMI and Norms |   |
|-------------------|---|
| Overvoltage       | EN 61000-4-2/-4/-5/-6/-11 Level 5 (4 kV), integrated for power & interface cables |
| EMC/EMI           | EN 61000-4-3, CE conform  |
| RoHS              | 2011/65/EU  |
| Norms             | WMO-No 8, VDI 3786 Bl. 7  |