



### Compact universal weighing precipitation gauge

- Parameters measured**  
 Cumulative precipitation, precipitation intensity, bucket content in real time and non real time
- Measurement technology**  
 Weighing principle
- Product Highlights**  
 Compact all-weather precipitation gauge for 2-inch pedestals, highly accurate, meets WMO requirements (Guidelines No. 8), nearly maintenance-free, lifetime calibrated
- Interface**  
 SDI-12, RS-485, impulse, status

The OTT Pluvio<sup>2</sup> S weighing precipitation gauge measures the intensity and cumulative precipitation in a broad measuring range from 0 to 3,000 mm/h. The professional rain gauge is a further development of the tried-and-tested OTT Pluvio<sup>2</sup>, with state-of-the-art technology in a compact design that captures up to 400 mm of precipitation on a collecting area of 200 cm<sup>2</sup>. It is virtually maintenance-free, fits onto 2-inch pedestals, needs little space and can replace conventional rain gauges or tipping buckets without any structural work

|                                 |                             |
|---------------------------------|-----------------------------|
| Recordable precipitation        | Liquid, solid, and mixed    |
| Recordable precipitation amount | 400 mm (approx. 8 l)        |
| Collecting area                 | 200 cm <sup>2</sup>         |
| Measurement method              | Weighing measurement method |

|                |                               |
|----------------|-------------------------------|
| Sensor element | Hermetically sealed load cell |
|----------------|-------------------------------|

| Measuring ranges   |                                    |
|--|------------------------------------|
| Precipitation  | 0 ... 50 mm/min or 0 ... 3000 mm/h |
| Cumulative precipitation threshold at 60 min. collection | 0.03 mm                            |
| Precipitation intensity threshold                        | 0.1 mm/h or 6 mm/h                 |

| Accuracy (at -25°C ... +45°C) |   |
|-------------------------------|---|
| Amount                        | ± 0.1 mm or ±1% of measured value                 |
| Intensity                     | ± 0.1 mm/min or ± 6 mm/h or ±1% of measured value |

| Resolution        |  |
|-------------------|--|
| SDI-12 and RS-485 | Amount: 0.001 mm<br>Intensity: 0.001 mm/min or 0.01 mm/h |
| Impulse output    | 0.05/0.1/0.2 mm, adjustable                              |

| Query interval |                  |
|----------------|------------------|
| Amount         | 6 sec ... 60 min |
| Intensity      | 1 min            |

| Output delay                    |         |
|---------------------------------|---------|
| Real-time                       | < 1 min |
| Non-real-time (filtered values) | 5 min   |

| Measurement output |  |
|--------------------|--|
| Measured data      | Intensity RT, amount RT/NRT, amount NRT, amount total NRT, bucket content RT and NRT, temperature of load cell |
| Status output      | Pluvio <sup>2</sup> S status, heating status (if present)  |

| Electrical data                       |   |
|---------------------------------------|---|
| Serial interfaces                     | SDI-12 V1.3, RS-485 (2- or 4-wire), SDI-12 protocol and command line mode (ASCII) |
| Digital outputs (2/5 Hz)              | Impulse 0.05/0.1/0.2 mm (adjustable); status 0 ... 120                            |
| USB (2.0)                             | Proprietary mode  |
| Power supply                          | 5.5 ... 28 V DC, secured against reverse polarity                                 |
| Current consumption (without heating) | Typically 9.2 mA at 12 VDC  |
| Power consumption (without heating)   | < 110 mW  |

| Ring heating, optional |   |
|------------------------|---|
| Power supply           | 12 ... 28 VDC, typ. 12/24 VDC, secured against reverse polarity |

|   |  |
|---|--|
| Heating capacity                            | 24 VDC / max. 50 W, temperature control range 45 K (wind speed 0 m/s);<br>12 VDC / max. 12.5 W, temperature control range 12 K (wind speed 0 m/s)  |
| Modes of operation of heater control system | Disabled, continuously enabled, continuously enabled within a specified temperature range, US NWS standard (time-controlled), enabled in case of precipitation (adjustable after-run time) |
| Operating range of orifice rim heater       | -40 °C ... + 60 °C (ambient temperature)   |

### Mechanical data

#### Dimensions and weight

|                       |                               |
|-----------------------|-------------------------------|
| Pluvio <sup>2</sup> S | 288 mm x 651 mm (Ø x h)       |
| Pedestal              | Ø 2" / 50 ... 60 mm           |
| Weight                | Approx. 7.8 kg (empty bucket) |

#### Material

|   |                           |
|---|---------------------------|
| Base plate                                    | Stainless steel/aluminium |
| Collecting bucket/bucket support/pipe housing | ASA, UV resistant         |

#### Environmental conditions

|                           |                                 |
|---------------------------|---------------------------------|
| Temperature, in operation | -40 ... +60 °C                  |
| Temperature, storage      | -40 ... +70 °C                  |
| Relative humidity         | 0 ... 100 % rF (non-condensing) |

#### Protection and Standards

|                     |                              |
|---------------------|------------------------------|
| Pipe housing closed | IP65                         |
| Pipe housing open   | IP63                         |
| Load cell           | IP67                         |
| EMC                 | 2004/108/EG; EN 61326-1:2013 |
| Salt resistance     | EN 60068-2-11                |