



Compact universal weighing precipitation gauge

- Parameters measured Cumulative precipitation, precipitation intensity, bucket content in real time and non real time
- Measurement range 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 Pluvio² 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 Pluvio², with state-of-the-art technology in a compact design that captures up to 400 mm of precipitation on a collecting area of 200 cm². 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 ²









Technical Data OTT Pluvio² S



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	0.03 mm
threshold at 60 min. collection	
Prec ipitation intensity threshold	0.1 mm/h or 6 mm/h

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

Resolution	
SDI-12 and RS-485	Amount: 0.001 mm
	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 (filterd 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 ² 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)	From stands to mimode
Power supply	5.5 28 V DC, secured against reverse polarity
Current consumption (without	Typically 9.2 mA at 12 VDC
heating)	
Power consumption (without	< 110 mW
heating)	

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









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

Mechanical data

Dimensions and weight	
Pluvio ² 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	ASA, UV resistant
support/pipe housing	

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	











