Technical data

Recordable precipitation
Liquid, solid, and mixed

Collecting area
200 cm²

Recordable precipitation amount
400 mm (approx. 8 l)

Measurement method
Weighing measurement method

Sensor element
Sealed load cell

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

Accuracy
- Amount: ±0.1 mm or ±1% of measured value
- Intensity: ±0.1 mm/min, ±6 mm/h or ±1 % of measured value

Resolution
- SDI-12 and RS-485 interface: Amount: 0.001 mm Intensity: 0.001 mm/min or 0.01 mm/h
- Impulse output: 0.05/0.1/0.2 mm, adjustable
  (remaining amounts in 1/100 mm will be factored in during the collecting time of 60 minutes)

Intensity output interval
1 minute

Query interval
1 minute … 60 min

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

Measurement output
Intensity *RT, amount RT/*NRT, amount NRT, amount total NRT, bucket content RT and NRT, temperature of load cell

Status output
Pluvio² S status, heating status (if present)

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 impulses/min
- USB (2.0) for service mode
  (no overvoltage protection)

Power supply
5.5 … 28 V DC, typically 12 VDC secured against reverse polarity

Current consumption (without heating)
Typically 9,2 mA at 12 VDC

Power consumption (without heating)
≤ 110 mW

Ring heating, optional
- 12 ... 28 VDC, typically 12/24 VDC, secured against reverse polarity
- Max. 2.2 A
- Max. 50 W at 24 VDC temperature control range 45 K (wind speed 0 m/s)
- Max. 12.5 W at 12 VDC temperature control range 12 K (wind speed 0 m/s)

Target temperature for orifice ring rim
+2 … + 9 °C, factory setting +4 °C

Operating range of orifice rim heater
–40 … + 60 °C (ambient temperature)

Modes of operation of orifice rim heater
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)

Dimensions
Pluvio² S: 288 mm x 651 mm (Ø x h)
Pedestal: Ø 2" / 50 … 60 mm

Weight
approx. 7.8 kg

Material
- Base plate: stainless steel/aluminium
- Collecting bucket: Polyethylene
- Bucket support: ASA, UV resistant
- 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
- Pipe housing closed: IP65
- Pipe housing open: IP63
- Load cell: IP68

Standards
- EMC: 2004/108/EG; EN 61326-1:2013
- Salt resistance: EN 60068-2-11

*RT = real-time; NRT = non real-time; units can be configured in mm or in (inch), mm/min or mm/h, in/min or in/h and °C or °F

Hydromet
Germany
OTT Hydromet GmbH
Ludwigstrasse 16 · 87437 Kempten
Phone +49 831 5617-0 · Fax -209
info@ott.com · www.ott.com