PRECIPITATION SENSOR “rain[e]”

Weighing precipitation sensor

The first of a new kind

rain[e] is a new type of weighing precipitation sensor: Highest resolution combined with the most compact design.

The unique self-emptying collection system enables the measurement of every single drop with the high resolution of 0.001 mm/m².

Full functionality all year around without antifreeze fluid makes the rain[e] very environmentally friendly.

rain[e] is easy to lift, transport, install and maintain. The small packing volume and the low weight ensure minimum logistical effort.

The rain[e] series is compatible with OTT and Campbell Scientific data loggers and ideal for setup and expansion of rainfall measurement networks.

- amazing resolution and accuracy
- checking of sensors with tipping bucket and other weighing systems
- compact and robust construction with a very low weight
- all-metal housing, weatherproof and durable
- best connectivity by several interfaces
- installation and maintenance are very simple

classical meteorology and hydrology • measuring networks of water suppliers • lysimeter systems • sewage plants • Weather Services • airports • traffic meteorology

Professional Line	**Weighing precipitation sensor rain[e]**
rain[e], unheated	**Id-No. 00.15184.000 000**
Measurement principle:	weighing with automatic self emptying
Operating temperature:	0...+70 °C (unheated)
Collecting area:	200 cm²
Amount measurement range:	without limitation (0.005…∞ mm)
Amount resolution:	0.001 mm (pulse output: 0.01 mm)
Amount accuracy:	± 0.1 mm or ± 1 % at < 6 mm/min and ± 2 % at ≥ 6 mm/min
Intensity range:	0…20 mm/min resp. 0…1200 mm/h
Intensity resolution:	0.001 mm/min resp. 0.001 mm/h
Intensity accuracy:	± 0.1 mm/min resp. ± 6 mm/h
Standards:	WMO-No. 8 • VDI 3786 Bl. 7 • EN 61000-2, -4 • EN 61000-4-2, -3, -4, -5, -6, -11 NAMUR NE-21
Protection class load cell:	IP67
Current consumption:	max. 45 mA at 24 V power supply and analogue output • typ. 7.5 mA at 24 V power supply and deactivated analog output • typ. 12.5 mA at 12 V
Supply voltage:	9.8...32 V DC
Signal outputs:	· SDI-12 • RS-485 (SDI-12 protocol, ASCII protocol, TALKER protocol) · 2 Pulse-Outputs for linearised, bounce-free output signal · Status-Output (configurable, e.g. rain yes/no or heating on/off) · Analogue output 0/4...20 mA (0...2.5/5 V)
rain[e], heated	**Id-No. 00.15184.400 000**
Data like rain[e] Id-No. 00.15184.000 000, but in addition with controlled 2-circuit-heating	
Target temperature (heating):	+2 °C funnel surface temperature
Heating power:	80 W (funnel) • 60 W (outlet/ tipping bucket)
Supply voltage:	24 V DC / 2 heating circuits 80 W and 60 W
Operating temperature:	-40...+70 °C (no icing, no snowdrift)

LAMBRECHT meteo
Tel +49 (0) 551-4958-0 www.lambrecht.net
E-mail info@lambrecht.net