

rain[e]one WEIGHING PRECIPITATION SENSOR



The entry-level model in the rain[e] series

The reasonably priced rain[e]one stands out due to its first-class, proven quality and equipment as in the premium class of the rain[e] series. Only the technical data (amount and intensity of all precipitation) differ slightly.

The latest weighing technology in a very small design combined with a self-emptying collecting system also allows the rain[e]one an excellent resolution and accuracy.

The rain[e]one is ideal to setup new measurement network as well as addition to an existing rainfall measurement network. The Modbus RTU interface simplifies sensor installation and integration into networks.

- amazing resolution and accuracy
- compact design, very low weight
- weatherproof all-metal housing
- best connectivity by several interfaces
- installation and maintenance are very simple

APPLICATIONS

- classical meteorology and hydrology
- measuring networks of water suppliers
- lysimeter systems
- sewage plants
- airports
- traffic meteorology

| Professional Line | rain[e]one Weighing precipitation sensor |
|-------------------------|---|
| Id-No. | 00.15184.000001 rain[e]one, unheated · 00.15184.400001 rain[e]one, heated |
| Measuring range | without limitation (0.005...∞ mm) |
| Accuracy | ± 0.1 mm or ±1% at < 6 mm/min and ± 2% at ≥ 6 mm/min |
| Amount of accuracy | 0.1 mm or 2 % |
| Amount of Resolution | 0.001 mm (pulse output: 0.01 mm) |
| Intensity range | 0...10 mm/min resp. 0...600 mm/h |
| Intensity of resolution | 0.001 mm/min resp. 0.001 mm/h |

Continued on page 2

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|--------------------------------|--|
| Output | <ul style="list-style-type: none"> • 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) |
| Collection surface | 200 cm ² |
| Environmental conditions | 0...+70 °C (unheated) • -40...70 °C (heated, no icing, no snow blowing) |
| Supply voltage | unheated: 9.8 ... 32 VDC • heated: 24 VDC / 2 heating circuits 80 W (funnel) and 60 W (outlet/ tipping bucket) |
| Power 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 |
| Target temperature (heating) | +2 °C funnel surface temperature |
| Measuring principle | weighing with automatic self emptying |
| Dimensions | 292 mm x 190 mm (H x D) |
| Protection class | IP67 |
| Standards | WMO-No. 8 • VDI 3786 Bl. 7 • EN 61000-2, -4 • EN 61000-4-2, -3, -4, -5, -6, -11 • NAMUR NE-21 |
| Accessories (order separately) | 00.15091.500XXX Windshield according to Tretyakov for measuring height 1 m, 1.5 m and 2 m 32.15180.023020 bird defense ring 32.15184.060000 sensor cable, 10 m, 8 pole, M12 plug 32.15184.061000 Power supply cable for sensor heating, 1 m 65.53090.160100 USB cable for sensor configuration |

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