

rain[e]H3

WEIGHING PRECIPITATION SENSOR



Reliable rainfall measurement even in extreme temperatures

Due to innovative weighing technology combined with a self-emptying collection vessel, the rain[e]H3 sets new standards in professional rainfall measurement. Its outstanding resolution and accuracy are recognized worldwide. The rain[e]H3, equipped with electronically controlled ring heating, is specifically designed for extremely cold climates. Features of continuous development include an integrated outdoor temperature sensor, a real-time clock, electronic monitoring when opening the housing, and remote maintenance. Additionally, with an optional port server and web interface, the rain[e]H3 is well-prepared for the communicative demands of the future.

- Electronically controlled ring-, funnel- and drain-line heatings
- Outstanding resolution and accuracy
- All-metal housing, weatherproof and long-living
- Easy installation and maintenance

APPLICATIONS

- Meteorology and hydrology
- Measuring networks
- Weather services

Professional Line	rain[e]H3
Id-No.	00.15184.540020
Measuring range	Without limitation (0.005... ∞ mm)
Amount of accuracy	± 0,1 mm or ± 1 % at < 6 mm/min and ± 2% at ≥ 6 mm/min
Amount of Resolution	0.001 mm
Intensity range	0...20 mm/min resp. 0...1200 mm/h
Intensity of resolution	0.001 mm/min resp. 0.001 mm/h
Output	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

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Professional Line	rain[e]H3
Environmental conditions	-40...+70 °C (no icing or snowdrift)
Supply voltage	9.8...32 V DC
Current consumption	Typically 7.5 mA at 24 V power supply, without Ethernet with RS485 Typically 12.5 mA at 12 V; max. 150 mA at 12 V power supply with Ethernet
Target temperature (heating)	+2 °C funnel-surface temperature; ± 1 °C
Measuring principle	Weighing with automatic self emptying
Design	Mounting mast Ø 60 mm
Heating data	Electronically controlled ring- (70 W), funnel- (70 W) and drain-line (60 W) heating
Dimensions	377 mm x 190 mm (H x diam.)
Protection class	Weighing cell: IP67; housing: IP64
Weight	Approx. 4 kg
Standards	WMO-No. 8; VDI 3786 sheet 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 32.15180.022020 Bird defense ring for rain[e]H3 32.15184.060000 Sensor cable, 10 m, 8 pole, M12 plug 32.15184.061000 Power supply cable for sensor heating, 1 m

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