

Rain Gauge

Rain gauge with stand

data logger and power

adapter (optional)

ZMS 156 for field use or with ground plate,

The Rain Gauge detects liquid precipitation (rain) falling on the ground. The model equipped with an integrated heating detects solid precipitation (snow or hail) as well.

The measurement is based on the tipping scale principle, where a Reed switch triggers an impulse per 0.1 mm of precipitation. This pulse is passed on to an external counter or can be routed to a PLC for logging purposes.

The model with integrated data logger saves the impulses corresponding to date, time and rain level. Thanks to the powerful internal rechargeable battery, this data logger operates self-sufficient and independent from mains power for an extremely long period. The logger automatically logs in with the most powerful GSM network and transmits measurement values to the NI/US Internet portal Device to Web >D2W< at a fixed price.

D2W provides a variety of options for evaluation through status monitoring and data forwarding to alarms. For operation during winter the model Type RM 202 with electronically controlled heating powered by an external power supply is available.

The rain gauge body is made of stainless steel and comes with a sieve preventing the drop collector stage from pollution through foliage or bird excrements.

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Enclosure Dimensions

Specifications

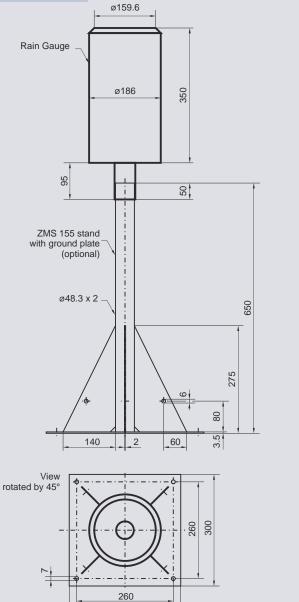
Rain Gauge	
Type RM 200	standard
Type RM 202	with heating
Capturing area	200 cm ²
Capacity of	
tipping scale	2 cm ³
Intensity	max. 11 mm/min
Resolution	0.1 mm precipitation
Accuracy output 1	at 0 - 11 mm/min ±3 %
Ambient temperature	• without heating 0 to 60 °C
	• with heating -25 to 60 °C
Weight	3.3 kg
Output signal 1	
Length of impulse	125 ms
Impulse frequency	0 to 2 Hz
Supply power	5 to 24 V DC
Closed current	(no precipitation) 50 µA
Impulse current	80 mA
R _a max.	$10 \text{ kOhm} (R_a \text{ at interface} (V_{cc} = 5 \text{ V}))$
R _v (series resist. in RG)	100 Ohm
Output signal 2	
Length of impulse	50 ms
Impulse frequency	0 to 2 Hz
Switching capacity	0.5 W
Switching voltage (V _{cc})	42 V
Type RM 202	
Heating	• 24 V DC
	• turn-on temperature 5 °C
	• hysteresis 2 °C
Heating power	48.5 W
Accessories (optional)	
Power pack	Type RMT0Z NTH01 85 - 265 V AC
Primary Secondary	24 V DC
	60 W
Power consumption Enclosure protection	IP65
Enclosure protection	1500

Data Logger		
Type NivuLog Easy SET RMK		
Data transmission	storage, processing, indication and calculation via Device to Web (D2W) Internet portal	
Internal memory for		
measurement values	25.000 cycles	
Logger operation with rechargeable battery	3.75 V, 13.6 Ah	
Protection	IP66	



Additional Accessoiries

ZMS 155	stand with ground plate and fastening tube 650 mm
ZMS 156	stand for field use incl. tensioning system; fastening tube 650 mm
Bird protection ring	protection from birds sitting on gauge (material: 1.4571)



300

