

Precipitation Transmitter

Part number: 5.4041.x1.00x

The device combines cutting-edge weighing technology in a very small space with a self-emptying collection vessel. The system provides excellent resolution and high precision. Even minute drops will be measured.

The weighing precipitation transmitter is suited for use in meteorological and hydrological monitoring networks as well as applications in the area of environmental monitoring.

Modbus RTU-interface facilitates installation of the sensor and its integration into networks. The device is WMO-compliant and is equipped with interfaces which are compatible with sensors with tipping bucket balances and other weighing systems. Other features are the compact, robust design, a very low weight, stainless steel housing, weather resistance and longevity. High connectivity is ensured by multiple interfaces as well as easy installation and maintenance.



Scope of application:

- Meteorology
- Climatology
- Hydrology
- Industry
- Environmental monitoring

Specification

Part number: 5.4041.x1.00x

Precipitation	
Collecting area	200 cm²
Resolution	0.001mm (pulse output: 0.01mm)
Meas. principle	Weighing with automatic self-emptying function
Intensity	0 ... 20mm/min or 0 ... 1200mm/h
Accuracy with quantity meas.	0.1mm or 1% (quantity 6 mm/min) 2% (quantity > 6 mm/min)
Precipitation types	Liquid (item without heating: solid, mixed)
Data output digital	
Output type	Pulses
Operating voltage	
Electronic	9 ... 32 V DC
Heating	24V DC, 140 W (item with heating)
General	

Ambient temp.	0 ... +70°C (item without heating) -40 ... +70°C (item with heating)
Mounting	At mast tube Ø 60mm
Protection	IP 67
Dimension	292mm x 190mm (H x D)
Weight	Approx. 2.7 kg
Material housing	Stainless steel

Versions

As per 5.4041.x1.00x, but:

Product number 5.4041.01.000

Data output digital	
Interface	RS485 - ASCII
General	
Heating	With heating at funnel, outlet and collection vessel
Ambient temp.	-40 ... +70 °C

Product number 5.4041.01.001

Data output digital	
Interface	RS485 - MODBUS RTU
General	
Heating	With heating at funnel, outlet and collection vessel
Ambient temp.	-40 ... +70 °C

Product number 5.4041.11.000

Data output digital	
Interface	RS485 - ASCII
General	
Heating	Without
Ambient temp.	0 ... +70 °C


Product number 5.4041.11.001

Data output digital	
Interface	RS485 - MODBUS RTU

General

Heating	Without
Ambient temp.	0 ... +70 °C

Accessories

Product	Product name	Brief description								
	Signalling cable 214165	CABLE, assembled M12 1.5 Meters POL: 8								
	Signalling cable 214166	CABLE, assembled M12 10 Meters POL: 8								
	Heating cable 214167	CABLE, assembled M12 1 Meters POL: 4								
	Heating cable 214168	CABLE, assembled M12 10 Meters POL: 4								
	Device to Refuse Birds 5.4010.00.010	<div>Protection against bird drop-pings for the collecting funnels of the Ombrometer (5.4032.35.007 / 008; 5.4033.35 / 36 ...).</div> <div>Refuses birds on the edge of the collecting funnel.</div> <div><div>General</div><table><tr><td>Mounting</td><td>Clamping diameter Ø 186 mm</td></tr><tr><td>Material</td><td>stainless steel</td></tr><tr><td>Dimension</td><td>Ø 360 x 100 mm</td></tr><tr><td>Weight</td><td>0.32 kg</td></tr></table></div>	Mounting	Clamping diameter Ø 186 mm	Material	stainless steel	Dimension	Ø 360 x 100 mm	Weight	0.32 kg
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	Tube extension and adaption 510217	The pipe extension / adaptation is required to achieve the collection height of 1m with the stand and to adapt the different diameters.								
	Stand, height 0.65 m 9.4031.35.065	<div>Model with<ul style="list-style-type: none">• Stand height 0.65 m (Collecting height 1.0 m)</div> <div><table><tr><td colspan="2">General</td></tr><tr><td>Height</td><td>0,65 m</td></tr><tr><td>Collection height</td><td>1 m</td></tr><tr><td>Weight</td><td>6.5 kg</td></tr></table></div>	General		Height	0,65 m	Collection height	1 m	Weight	6.5 kg
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