

Precipitation Sensor Young

Simple and effective rainfall measurement



Description

Meets the specifications of the World Meteorological Organization (WMO)

Catchment area of 200 cm² and measurement resolution of 0.1 mm meet the recommendations of the WMO.

The design uses a proven tipping bucket mechanism for simple and effective rainfall measurement. The bucket geometry and material are specially selected for maximum water release, thereby reducing contamination and errors.

Leveling screws and bulls-eye level are built in for easy and precise adjustment in the field. Measured precipitation is discharged through a collection tube for verification of total rainfall.

Model S73100H is heated for operation in cold temperatures. An unheated version, S73100, is available for use in moderate climates. To discourage birds from perching on the funnel rim, accessory bird wire assembly may be attached to the gauge.

Location of rain gauge

Precipitation measurement is greatly affected by location of the rain gauge. Select a location that is naturally protected from gusts and crosswinds. Avoid a site prone to contamination from debris such as falling leaves, dirt, etc.

Specifications

Characteristic	
Collector surface	200 cm ²
Resolution	0.1 mm per tipping-bucket pulse
Accuracy	2 % up to 25 mm/hr
Measuring range	max. 11 mm/min.

Characteristic	
Measuring principle	tipping-bucket
Electrical output	Magnetic reed switch (N.O.), rating 24 VAC/DC, 500 mA
Ambient temperature	-20 ... +50 °C (with heating)
Heating	18 W, 24 VAC
Mounting	Clamp for 1" iron pipe (o.d. 1.24") or 3 bolts on 160 mm dia. circle
Dimensions	Ø 180 x 300 mm (390 mm with mounting base)
Manufacturer	Young
Accessories	Module M83200 or M83570

Sensor connection diagram

Sensor	Plug Pin No.	Ammonit Cable Wire Colour	Meteo-40 Counter	Supply Sensor
Precipitation Pulse output	A	white	CNT, 6k8 (Switch: 5 V via 6k8 to CNT, Pull-up resistor)	
	B	black		Main Ground
Heating	C	orange, orange		24 VAC/DC
	D	violet, violet		

Cable type without heating: LiYCY 2 x 0.25 mm²
 Connect the shield logger-sided to Ground (GND)

