



Lufft WS100 Radar Precipitation Sensor

Product #: 8367.U04
USD Price: Contact Hach

The smart radar rain sensor & present weather detector! The Lufft WS100 is our rain sensor with radar technology and adjustable heating. Using a 24-GHz Doppler radar, it measures the speed of all forms of condensed water. These include rain, freezing rain, hail, snow and sleet.

The low-energy sensor detects precipitation from the first drop. Its possible uses are nearly unlimited. Whether in hydrology and water management, agricultural and environmental science, building automation, meteorology or airport and traffic control: the rain gauge measures rain almost anywhere in the world.

Specifications

*Parameters Measured:	Rain/precipitation quantity
	Rain/precipitation type
	(Rain, snow, sleet, freezing rain, hail)
Accuracy:	$\pm 0.16\text{mm}$ or $\pm 10\%$ of the measured value for liquid precipitation
Cable Length:	10 m
Country Version:	USA, Canada
Diameter:	60 - 76 mm
Dimensions:	$\varnothing 150\text{ mm}$ (5.9 in), height: 190 mm (7.48 in)
Droplet Distribution:	11 drop size classes with bandwidth of 0.5 mm
Droplet size:	0.3-5.0 mm
Interface:	RS-485 semi-duplex two-wire, SDI-12, pulse interface / UMB protocol, Modbus
IP Rating:	IP66
Measurement technology:	24GHz Doppler radar
Measuring surface:	9 cm ²
Operating Frequency:	24 GHz
Operating Humidity:	0-100 %
Operating Temperature Range:	-40-60 °C
Particle Velocity:	0.9-15.5 m/s
Power Consumption:	1 VA / 0.4 VA (low power mode)
	9 VA (heating power)
Power Supply:	10-28 VDC

Precipitation:	0.01-200 mm/h / 0-7.874 inch/h
Precipitation Solidity:	5.1-~30 mm
Product highlights:	Very fast response time, maintenance-free measurement, present weather detection
Resolution:	0.01 / 0.1 / 0.2 / 0.5 / 1.0 mm (pulse interface)
Types of precipitation:	Rain, snow, sleet, freezing rain, hail, drizzle; No precipitation (SYNOP 4677)
Weight:	~0.6 kg
Wind Speed:	75 m/s