

## EVERY SECOND COUNTS: THE MAINTENANCE-FREE WS100 MEASURES PRECIPITATION FROM THE FIRST DROPS



*WS100 from Lufft: maintenance-free and extremely fast*

Especially in the cold and wet season, it is vital that operational decisions can be made and implemented within a few seconds. This is especially true for meteorological data evaluations for aviation and road traffic. With the WS100, sensor manufacturer Lufft developed a radar precipitation sensor detecting precipitation types and intensities quickly, reliably and maintenance-free with a resolution of 0.01 mm.

Using a 24-GHz Doppler radar, the WS100 measures the velocity of all forms of condensed water that can be observed on the Earth's surface or in the atmosphere. These include rain, snow, ice, snow and hail. The energy-efficient sensor detects precipitation from the first drops and differentiates between different types of precipitation. In addition, it measures precipitation intensities of up to 200 mm per hour and records drops with a size of up to 5.0 mm.

The WS100's sophisticated automatic radar gauge does without moving parts and is maintenance-free. Thus, it stands out from other precipitation measuring systems, such as the tipping bucket, weighing principle or optical ones. The integrated, switchable heater allows operation in summer as well as in winter. It has a capacity of 9 VA and is directly integrated where it's needed the most: into the WS100's dome wall.

Thanks to the 100% maintenance-free operation, the 19-centimeter high sensor weighing just 600 grams can be used at any time and almost anywhere in the world. This makes it an indispensable indicator for environmental applications, especially in areas that are difficult to access. As a result, its applications are diverse and adapt to various requirements.

The precipitation sensor with radar technology is suitable for weather observation, observations in winter road clearance, road and traffic control systems (SWIS), airports (RWIS), as well as road and motorway maintenance areas. It is also used as a weather sensor for meteorological services or in weather stations to warn against avalanches and floods. Moreover, the intelligent sensor can be a great aid for agricultural meteorological or hydro-meteorological measuring stations. Here, too, precise weather observations and forecasts can be enhanced and fatal effects can be counteracted.

Due to country-specific requirements for radar technology, the WS100 is available in two product variants for both the European market and the American and Canadian market. The WS100 radar precipitation sensor has an SDI-12 and RS-485 interface with Modbus RTU protocol to ensure reliable data transmission.

**Important facts of WS100:**

- 100 percent maintenance-free operation
- Direct dome heating
- Improved radar properties thanks to newly developed lens
- Detection of type and quantity of precipitation
- Precise measurement from the first raindrops
- Multiple and simultaneous interfaces for data output and communication
- Improved power consumption as well as ECO mode
- Made in Germany: Developed by Lufft

You'll find further information here: [http://bit.ly/Lufft\\_WS100\\_en](http://bit.ly/Lufft_WS100_en)

**ABOUT G. LUFFT MESS - UND REGELTECHNIK GMBH:**

Since its founding by Gotthilf Lufft in 1881, G. Lufft GmbH has been the leader in the production of climatological measuring equipment – always true to the motto "tradition meets innovation". Lufft's capacity for innovation and precision has helped its products establish the solid reputation they enjoy around the world. The company's products can be found in use wherever variables such as air pressure, temperature, relative humidity and other environmental factors need to be measured. Together with its subsidiaries in the U.S. and in China, the company has 105 employees. In November 2012, G. Lufft GmbH was awarded the German Standards Brand Prize and was named a "Brand of the Century". For more information visit [www.lufft.com](http://www.lufft.com).

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