

# Lufft R2S-UMB – Precipitation Sensor (Present Weather Detector)

The drop speed is captured with a 24-GHz-Doppler radar.

The precipitation quantity and intensity is calculated from the correlation between drop size and speed.

The type of precipitation (rain, snow, sleet, freezing rain, hail) is detected from the difference in drop speed.

The measurement data is available for further processing in the form of a standard protocol (Lufft UMB protocol).

| Lufft R2S-UMB Precipitation Sensor |  | Order No.  |
|------------------------------------|--|--|
| <b>R2S-UMB</b> EU, USA, Canada     |  | <b>8367.U01</b>  |
| <b>R2S-UMB</b> UK                  |  | <b>8367.U02</b>  |
| <b>Technical Data</b>              | Resolution liquid precipitation        | 0.01...0.1...1mm/m <sup>2</sup>                                    |
|                                    | Power supply                           | 20...28VDC   |
|                                    | Power consumption without heating      | 2VA  |
|                                    | Heating power                          | 30A  |
|                                    | Op. temperature range                  | -40...+60°C  |
|                                    | Op. humidity range                     | 0...100%   |
|                                    | Protection                             | IP66   |
|                                    | Interface                              | RS485 semiduplex wire, UMB protocol, pulse and frequency interface |
|                                    | Cable length                           | 10m  |
|                                    | Measuring range hail                   | 5.1... Approx. 30mm  |
| Type of precipitation              | Rain, snow, sleet, freezing rain, hail |  |
| <b>Precipitation</b>               | Principle                              | Doppler-Radar  |
|                                    | Reproducibility                        | Typ. >90%  |
|                                    | Measuring range drop size              | 0.3...5mm  |
| <b>Accessories</b>                 | UMB Interface converter ISOCON-UMB     | <b>8160.UISO</b>   |
|                                    | Power supply 24V/4A                    | <b>8366.USV1</b>   |
|                                    | Protection shield for R2S-UMB          | <b>8367.SCHIRM</b>   |
|                                    | Traverse for R2S-UMB + WS500-UMB       | <b>8367.TRAV1</b>  |
|                                    | Surge protection                       | <b>8379.USP</b>  |
|                                    | Digital-analog-converter DACON8-UMB    | <b>8160.UDAC</b>   |
|                                    | Connection cable, 20m                  | <b>8370.UKAB20</b>   |



Maintenance-free  
Fast response time  
Present weather detector  
Resolution 0.01mm