



**Reliable Data. Confident Decisions. Safe Runways.** We provide accurate runway conditions reports, that comply with the new in ICAO-compliant Global Reporting Format (GRF), to enhance runway safety and expand efficiency in your airport operations.

- **Parameters measured**  
Road condition (dry, moist, wet, ice, snow, slush, chemically wet), road surface temperature, ambient temperature, water film height up to 6mm, dew point temperature, relative humidity, ice percentage, friction (calculated), Runway Condition Code (RCC)
- **Product highlights**  
Digital Runway Condition Report (RCR) and SNOWTAM report workflow; ICAO GRF compliant; easy and fast access to data and results

With reliable and proven data from the mobile runway condition sensor MARWIS and the ViewMondo RCAM software, airports around the world are keeping their runways safe with minimal effort – RCAM stands for Runway Condition Assessment Matrix. The software also supports airport operators in staying compliant with the latest ICAO GRF regulations by providing the Runway Condition Report (RCR) in the ICAO GRF format as well as a SNOWTAM report based on the Measurement Drive.

Would you like to know more? Get your DEMO now!

| General    |   |
|------------|---|
| Dimensions | Height approx. 110 mm, width approx. 200 mm, depth approx. 100 mm |
| Weight     | 1.7 kg  |

|   |  |
|---|--|
| Admissible storage temperature            | -40...70 °C  |
| Operating rel. humidity                   | <95 % relative humidity non-condensing                   |
| Operating voltage                         | 10...28 VDC on the sensor                                |
| Power consumption                         | Approx. 3VA without heating, 50VA with heating           |
| Operating temperature                     | -40...60 °C  |
| Operating rel. humidity                   | 0...100 % RH   |
| Protection type                           | IP68   |
| Surface conditions                        | Dry, damp, wet, snow-/ice-covered, chemically wet, slush |
| Admissible height above absolute altitude | 3000 m   |
| Interface                                 | RS485, 2 wire, half duplex, bluetooth, CAN               |

| Road surface temperature |                 |
|--------------------------|-----------------|
| Principle                | Optical         |
| Measuring range          | -40...70 °C     |
| Unit                     | °C              |
| Accuracy                 | ± 0.8 °C @ 0 °C |
| Resolution               | 0.1 °C          |

| Ambient temperature |                             |
|---------------------|-----------------------------|
| Measuring range     | -50...70 °C (°F switchable) |
| Unit                | °C (°F switchable)          |
| Resolution          | 0.1 °C                      |

| Relative air humidity |   |
|-----------------------|---|
| Measuring range       | 0...100 %   |
| Unit                  | %   |
| Resolution            | 1 %   |
| Principle             | passive, calculated out of air temperature and humidity |

| Relative humidity above road surface |  |
|--------------------------------------|--|
| Measuring range                      | 0 ... 100 %  |
| Unit                                 | %  |
| Resolution                           | 0.1 %  |
| Principle                            | passive, calculated out of air temperature and humidity above road surface |

| Dew point temperature |   |
|-----------------------|---|
| Measuring range       | -50 ... 60 °C   |
| Unit                  | °C  |
| Resolution            | 0.1 °C  |
| Principle             | passive, calculated out of air temperature and humidity |
| Accuracy              | 1.5 °C @ temperature of 0...35 °C                       |

## Waterfilm film height

# Technical Data

MARWIS - Mobile Sensor for Runway Condition Assessment - ICAO GRF compliant



|                 |  |
|-----------------|--|
| Principle       | Optical  |
| Measuring range | 0 ... 6000 $\mu\text{m}$<br>Max. WFH is only achieved with concrete underground. For asphalt, the maximum measurable water film height is smaller and depends on the distance to the ground. |
| Unit            | $\mu\text{m}$  |
| Resolution      | 1 $\mu\text{m}$  |
| Accuracy        | 10%  |

|                       |             |
|-----------------------|-------------|
| <b>Ice Percentage</b> |             |
| Measuring range       | 0 ... 100 % |
| Unit                  | %           |
| Resolution            | 1%          |

|                 |       |
|-----------------|-------|
| <b>Friction</b> |       |
| Measuring range | 0...1 |
| Resolution      | 0.01  |