



For stationary operations we further developed the innovation award-winning mobile road weather Sensor MARWIS - this is StaRWIS!

- **Parameters measured**
Road condition (dry, moist, wet, ice, snow, critical wet, chemically wet), road surface temperature, water film height, dew point temperature, relative humidity, ice percentage, freezing temperature, friction (calculated)
- **Measurement technology**
Optical LED transmitters, photo receivers, pyrometer, infrared
- **Product highlights**
non-invasive, plug and play, 100 measurement per second, multifunctional, wireless data transfer, no moving parts
- **Interfaces**
Bluetooth, RS485, CAN-Bus, UMB - protocol
- **Article number**
8711.U55

StaRWIS is the first non-invasive road weather sensor detecting road and runway surface conditions, surface temperatures, relative humidity, dew & freezing temperatures, ice percentages as well as friction non-invasively and based on innovative LED Technology with 4 lenses.

General

Dimensions	Height approx. 110 mm, width approx. 200mm, depth approx. 100mm
Weight	1.7kg
Admissible storage temperature	-40...70°C
Operating rel. humidity	<95% relative humidity non-condensing
Operating voltage	10VDC...28VDC 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, critically wet
Admissible height above absolute altitude	3000m
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

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

Waterfilm height	
Principle	Optical
Measuring range	0 ... 6000 µm
Unit	µm
Resolution	1 µm

Ice Percentage	
Measuring range	0 ... 100 %
Unit	%
Resolution	1%

Technical Data

StaRWIS-UMB - Stationary Road Weather Information Sensor



Friction

Measuring range	0 ... 1
Resolution	0.01