

# Wind sensors for wind energy



## ASK ABOUT: Yield Optimization

If you're designing a new wind farm or looking to optimize your current layout, Lambrecht sensors provide the data you need.

## Wind sensors for wind turbines all over the world

When it comes to wind turbines, durability, reliability, and yield optimization are the three most important factors. Sensors from Lambrecht meteo, an AEM brand, ensure you know the exact conditions at your wind farm in real time. No matter where you're harnessing the power of wind - offshore, on the coast, in the desert, or in any variety of extreme weather conditions - our products can help you maximize your turbines.

### OVERVIEW

Lambrecht sensors have supported smooth and profitable wind turbine operations for decades, with installations on every continent. Features include:

- Wide measuring and temperature ranges
- High resolution and accuracy
- Durable, seawater-resistant materials
- Easy installation with universal mounting fixture



u[sonic]WS6  
For six weather parameters



# Reliable weather data, Industry-best hardware

Our wind and weather sensors are extremely robust and maintenance-free. Their proven long-term stability guarantees a long service life even under extreme weather conditions.

## All-in-one: Weather Sensor u[sonic]WS6

**Measuring range:** Wind direction: 0...360° • Wind speed: 0...65 m/s  
**Operating conditions:** -40...+70 °C (with heating -50...+70 °C) • 0...100 % r. h.  
**Accuracy:**  
 Wind direction: < 2° (> 1 m/s) RMSE  
 Wind speed: 0.2 m/s RMSE (v < 10 m/s) • 2 % RMSE (10 m/s < v < 65 m/s)  
 Air temperature: 0.1K (0...60 °C) • 0.2K (-40...0 °C)  
 Relative humidity: typically 1.5 % (0...80 %) r. h. • 2 % (> 80 %) r. h.  
 Air pressure: 0.5 mbar  
**Output:** NMEA 0183 • SDI-12 • Modbus RTU

## Ultrasound: Wind Sensor u[sonic]

**Measuring range:** Wind direction: 0...360° • Wind speed: 0...75 m/s  
**Operating conditions:** -40...+70 °C (with heating -50...+70 °C) • 0...100 % r. h.  
**Accuracy:**  
 Wind direction: < 2° (> 1 m/s) RMSE  
 Wind speed: 0.2 m/s RMSE (v < 10 m/s) • 2 % RMSE (10 m/s < v < 65 m/s)  
**Output:** 0...20 mA • 4...20 mA • 0...5V • 0...10V • NMEA 0183 • SDI-12 • Modbus RTU

## Cold Climate: Wind Sensor PROFESSIONAL-IX 3.0

**Measuring range:** 0...360° • 0.4...50 m/s  
**Operating conditions:** -40...+70 °C (heated) • 0...60 m/s • 0...100 % r. h.  
**Accuracy:**  
 Wind direction: 1°  
 Wind speed: 2 % FS at 0.4...50 m/s  
**Output:** 0...20 mA • 4...20 mA • Modbus RTU

## The classic: Wind Sensor PRO-WEA

**Measuring range:** 0...360° • 0.5...75 m/s  
**Operating conditions:** -40...+70 °C (heated) • max. gusts 100 m/s • 0...100 % r. h.  
**Accuracy:**  
 Wind direction: 2°  
 Wind speed: 0.3 m/s ≤ 10 m/s • 0.5 m/s...60 m/s  
**Output:** 4...20 mA • Modbus RTU

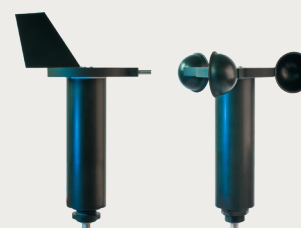
## THE SENSORS:



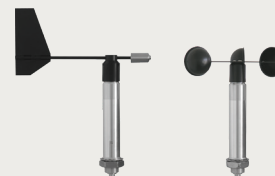
u[sonic]WS6



u[sonic]



PROFESSIONAL IX 3.0



PRO-WEA



### WHY AEM?

Lambrecht meteo, an AEM brand, develops and manufactures world-class meteorological sensors and measurement solutions for wind, precipitation, pressure, temperature, and humidity serving various classical meteorological and highly specific environmental and industrial end-markets. Our highest goal is to deliver state-of-the-art sensors and customer-friendly complete measurement solutions including data acquisition, maintenance, and service. With our products and the portfolio of the AEM family of innovative brands, we aim to be a globally established brand and to provide a wide range of meteorological applications with flexible and high-quality solutions for our customers' weather measurement tasks.

