LAMBRECHT
METEOROLOGICAL INSTRUMENTS GERMANY

World Wide Wind Energy

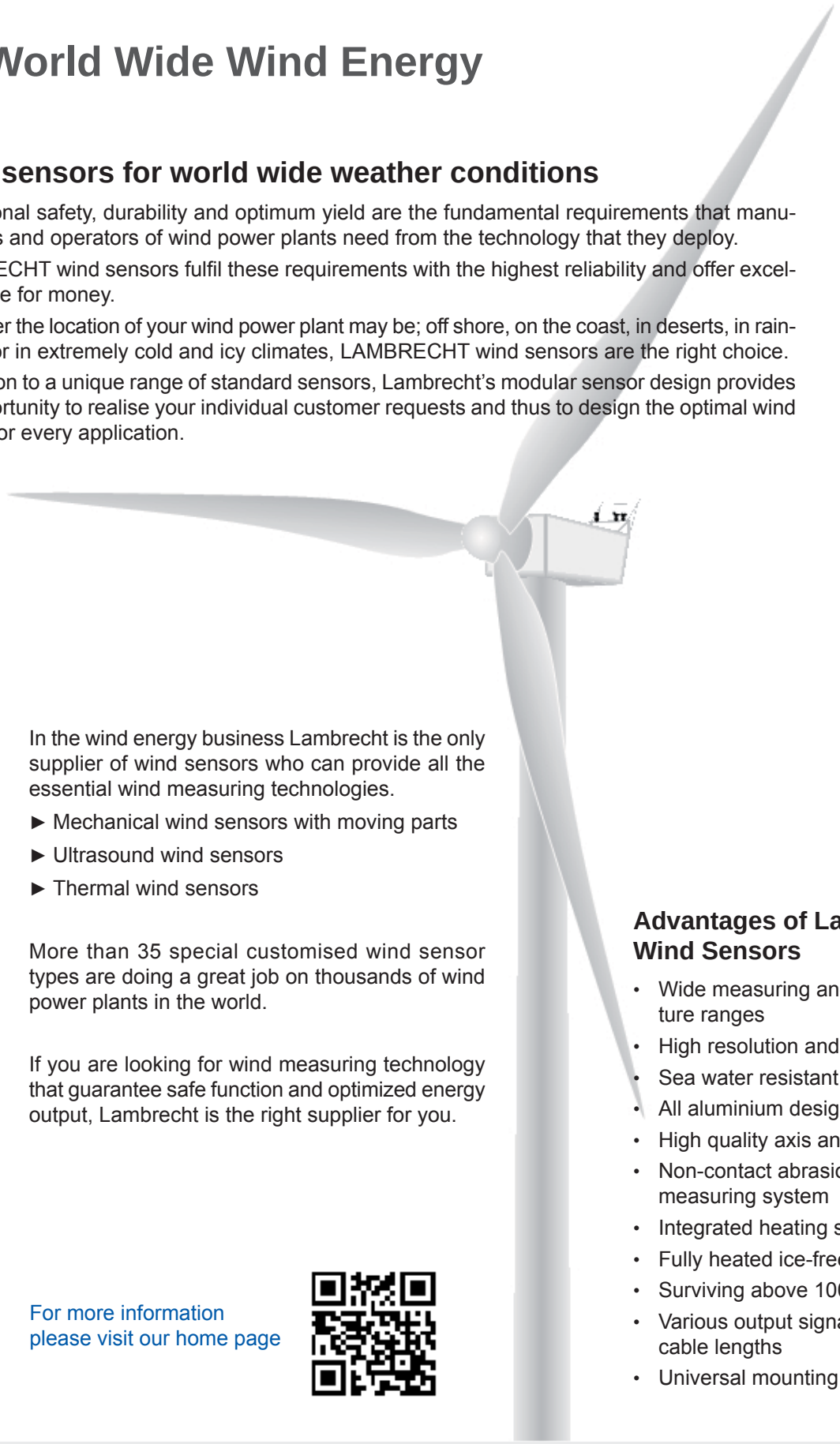
Wind sensors for world wide weather conditions

Operational safety, durability and optimum yield are the fundamental requirements that manufacturers and operators of wind power plants need from the technology that they deploy.

LAMBRECHT wind sensors fulfil these requirements with the highest reliability and offer excellent value for money.

Wherever the location of your wind power plant may be; off shore, on the coast, in deserts, in rainforests or in extremely cold and icy climates, LAMBRECHT wind sensors are the right choice.

In addition to a unique range of standard sensors, Lambrecht's modular sensor design provides the opportunity to realise your individual customer requests and thus to design the optimal wind sensor for every application.



In the wind energy business Lambrecht is the only supplier of wind sensors who can provide all the essential wind measuring technologies.

- ► Mechanical wind sensors with moving parts
- ► Ultrasound wind sensors
- ► Thermal wind sensors

More than 35 special customised wind sensor types are doing a great job on thousands of wind power plants in the world.

If you are looking for wind measuring technology that guarantee safe function and optimized energy output, Lambrecht is the right supplier for you.

For more information
please visit our home page

Advantages of Lambrecht Wind Sensors

- Wide measuring and temperature ranges
- High resolution and accuracy
- Sea water resistant materials
- All aluminium design
- High quality axis and bearings
- Non-contact abrasion free measuring system
- Integrated heating system
- Fully heated ice-free sensor
- Surviving above 100 m/s
- Various output signals and cable lengths
- Universal mounting device

(ES) Equipements Scientifiques SA - Département Bio-tests & Industries - 127 rue de Buzenval BP 26 - 92380 Garches
Tél. 01 47 95 99 90 - Fax. 01 47 01 16 22 - e-mail: bio@es-france.com - Site Web: www.es-france.com

World Wide Wind Energy

Moderate Weather Conditions

- wide measuring range
- integrated heating system
- safe data aquisition

Off-Shore and Seaside

- all aluminium design
- seawater resistant
- surviving above 100 m/s

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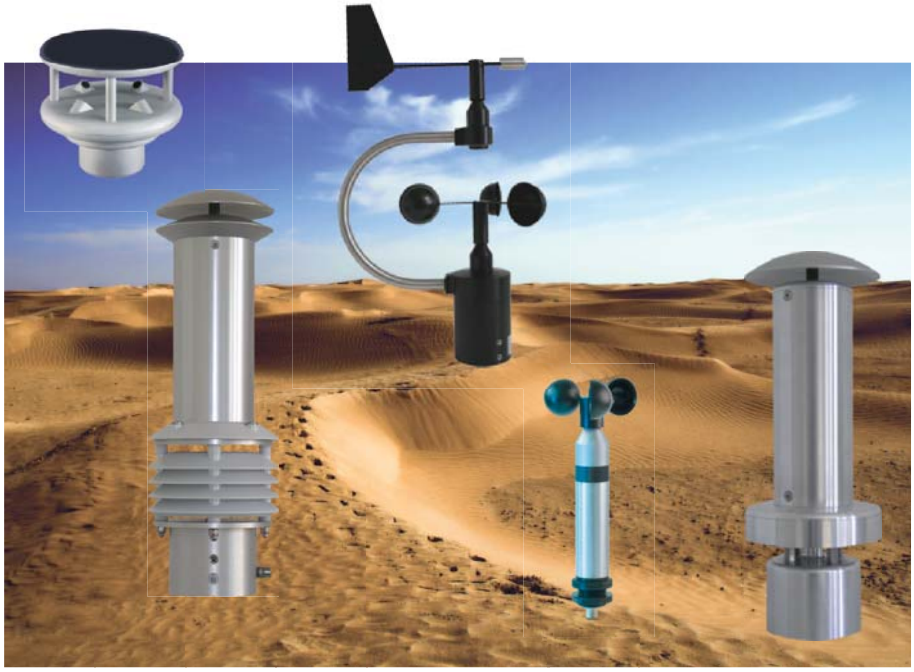
Cold Climate and Icing

- fully heated ice-free sensor
- high resolution and accuracy
- robust all aluminium design

Tropics and Deserts

- high quality axis and bearings
- wide temperature range
- various output signals



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WIND ENERGY

The right wind sensor for all weather conditions.

	**INDUSTRY** Range of application: -30...+70 °C • 0...60 m/s Robust, seawater-proof materials	Measuring range: 0...360° • 0.7...50 m/s Accuracy: ± 2° • < ± 2 % FS Starting value: < 0.7 m/s • < 0.7 m/s Output: 4...20 mA = 0...360° • 0/4...20 mA = 0...50 m/s
	**PRO-WEA/RF** Range of application: -40...+70 °C • max. gusts 100 m/s Reinforced measuring elements	Measuring range: 0...360° • 0.6...60 m/s Accuracy: ± 2° • ± 0.3 m/s ≤ 10 m/s; ± 0.6 m/s...60 m/s Starting value: < 0.5 m/s • < 0.6 m/s Output: 4...20 mA = 0...360° • 4...20 mA = 0...60 m/s
	**PROFESSIONAL** Range of application: -40...+70 °C • max. gusts 100 m/s Highest reliability, seawater resistant	Measuring range: 0...360° • 0.3...75 m/s Accuracy: ± 1° • ± 0.3 m/s ≤ 10 m/s; ± 1 % FS ...50 m/s Starting value: < 0.3 m/s • < 0.3 m/s Output: 4...20 mA = 0...360° • 4...20 mA = 0...75 m/s
	**ARCO** Range of application: -30...+70 °C • 0...80 m/s Combined Wind Sensor	Measuring range: 0...360° • 0.6...75 m/s Accuracy: ± 1° • ± 2 % FS at 0.3...50 m/s Output: serial RS 422 • NMEA 0183
	**PROFESSIONAL-IX 3.0** Range of application: -40...+70 °C • 0...60 m/s Cold Climate	Measuring range: 0...360° • 0.4...50 m/s Accuracy: ± 1° • ± 2 % FS at 0:4...50 m/s Starting value: 0.4 m/s • 0.4 m/s Output: 4…20 mA = 0…360° • 0/4…20 mA = 0...50 m/s
	**PREOS** Range of application: -40...+70 °C • 0...100 m/s Combined Static Sensor	Measuring range: 0...360° • 0.1...65 m/s Accuracy: ± 3° • ± 0.5 m/s ± 5 % of meas. value Output: NMEA 0183
	**BLUESONIC** Range of application: -40... +60 °C Combined Ultrasonic Sensor	Measuring range: 0...359.9° • 0...65 m/s Accuracy: < 2° (>1 m/s) RMSE • ± 0.2 m/s RMSE (v<10 m/s); ± 2 % RMSE (v>10 m/s) Output: NMEA 0183
	**EOLOS** Range of application: -40...+70 °C • 0...100 m/s Combined Static Sensor	Measuring range: 0...360° • 0.1...85 m/s Accuracy: ± 3° • ± 0.5 m/s ± 5 % of meas. value Output: NMEA 0183

Quality System certified by DQS according to DIN EN ISO 9001:2008 Reg. No. 003748 QM08

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