

# Labkotec Ice Detection

ENG

Efficient ice detection system  
improves safety and profitability

Easy and quick installation

Ready to use after installation,  
no calibration needed

Suitable for old and new wind turbines

Suitable for all manufacturer's wind turbines

Easy remote access to  
alarms and parameters



LabkoNet<sup>®</sup>  
COMPATIBLE



Measures for a better tomorrow

 **Labkotec**  
INDUTRADE GROUP

# Safety and sustainability to cold climate wind turbines

## Labkotec Ice Detection

- Improves safety
- Optimises wind turbine operations and extends their life cycle

### Prevent accidents

Ice accumulating on the blades of a wind turbine poses a significant safety risk to people and buildings in the vicinity. The Labkotec ice detection system detects icing weather conditions and sends you an alert so you can initiate the necessary actions accurately when needed.

### Meet the requirements

Ice detection is often required to operate a wind farm in icing conditions. With the Labkotec ice detection system, you'll meet these requirements.

### Optimise wind turbine operations

With the help of ice detection, the wind turbine operates optimally even in icing weather conditions. Combined with blade heating, ice detection increases wind turbine operating hours by minimising downtime.

### Applications

- Wind turbines
- Weather stations
- Airports
- Communication masts



Ice that accumulates on the surface of the blades strains the mechanics of the wind turbine and thus shortens its lifetime – and large masses of ice can damage the blades. When you use the Labkotec ice detection system, you can extend the life cycle of the wind turbine.

### Ready to use with easy installation

Labkotec ice detection system is easy and quick to install on any manufacturer's wind turbine, including wind turbines that are already in use. Installation does not require separate lifting equipment or separate calibration.

Easy remote access and monitoring can connect the Labkotec ice detection to different SCADA systems, and update the software remotely. Also, it's fully compatible with LabkoNet® – a flexible and easy to use remote monitoring system, to transfer and control alarm data.

### The market leader

We have manufactured nearly 10,000 ice detection systems since the 1990s, and today Labkotec is the world's most widely used ice detection system. We cooperate with all major wind power companies.

## Labkotec Ice Warning

- Warns for icing conditions to prevent accidents

### Protect people

Labkotec ice detection and ice warning light systems are backed by quality and experience.

The purpose of the system is to protect people and property in the vicinity and provide a warning in an early stage of atmospheric conditions.

### Wireless ice warnings

The system includes Labkotec ice detector, a base station and the requisite number of a different kind of substations.

The base station wirelessly transmits the ice warnings to the warning lights. The substation warns when the base station sends an ice alarm. The ice warning activates the red beacon light.



### Tailored implementation

- On-site survey
- Preparation of a radio network plan: the number and location of warning lights, special requirements
- Coverage area and topography
- Commissioning and training





# Measures for a better tomorrow

Labkotec is a leading measurement equipment manufacturer, and related services provider. Our mission is to provide measurement solutions which enhance our customers business and help them to protect the environment and people.

Labkotec's comprehensive export product range comprises ice detection systems, alarm devices for oil and grease

separators, a wide range of level measurement and detections instruments as well as LabkoNet® system, which offers our customers remote onsite monitoring of measurement and alarm information.

## Sustainability in Labkotec

We are committed to sustainable business with an eye in the future. We strive to create long-term value and for us, sustainability is a driving force for developing our business to create sustainable growth.

We provide sustainable measurement solutions which help our customers not only to protect the environment and people, but also to save energy, water, materials and CO<sub>2</sub> emissions. We work systematically through continuous improvements and the efficient use of materials and resources to minimize the emissions and waste.

In our own operations, sustainability is built around three key elements: people, environment and sustainable growth.



Measures for a better tomorrow



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