

BLADEcontrol®**NXT**

Wind Solutions

BLADEcontrol® NXT

Next generation condition monitoring

The next generation of our condition monitoring system BLADEcontrol® is ready for release in 2026. BLADEcontrol® NXT incorporates a number of important innovations in rotor blade monitoring. Above all, the introduction of optical data and energy transmission is a milestone that is of great importance for particularly reliable, lightning-proof systems. BLADEcontrol® NXT also offers a number of new advantages and advanced analysis options.

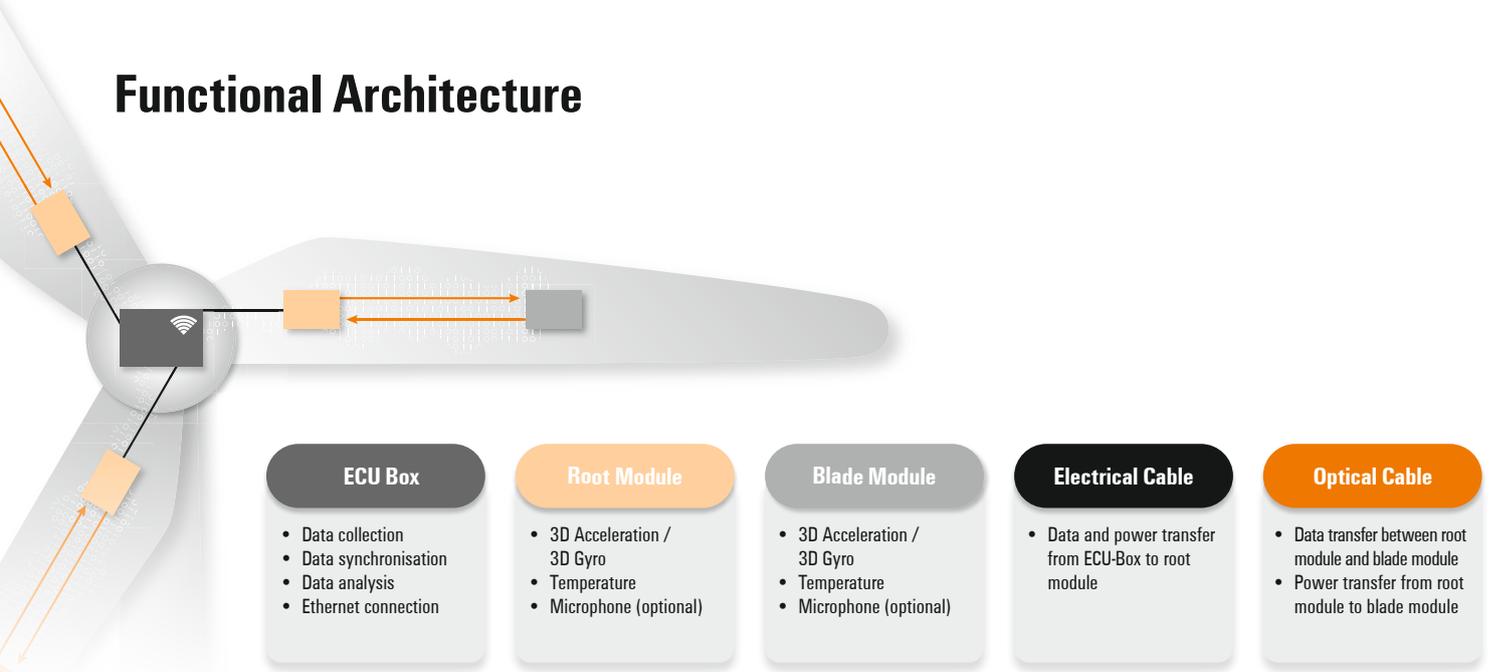
For example, with both a 3D acceleration sensor and a gyroscope installed in separate positions in each blade, BLADEcontrol® NXT delivers state-of-the-art monitoring, including more precise blade damage detection and localisation.

Profit from the technical advantage of our next level monitoring solution to maximize your turbine performance!

Advantages at a glance:

- Enhanced performance of condition monitoring including ice and damage detection due to additional sensors and measurement positions
- Lightning-safe equipment thanks to optical data and power transfer
- Deeper insight into structural health of rotor blades
- Maintenance-free system
- Real-time data analysis with edge computing
- State-of-the-art MEMS sensor technology

Functional Architecture



What's new?

Optical link for power and data transfer

- Blade module powered via optical fiber (PoF)
- Optical link provides electrical insulation between system and lightning-rod system
- System optimized for large onshore and offshore turbines
- No limitations for installation positions
- Excellent performance for even more precise condition monitoring and ice detection

New analysis opportunities

- Deeper insight into structural health of rotor blades due to combination of acceleration, gyro and microphone MEMS sensors – detection of additional damage patterns
- Two measurement positions (blade root and 1/3 blade length) – expansion of detection area beyond the blade
- Synergies between new sensors will improve condition monitoring performance and detection accuracy

Become part of our innovation – benefit from 20 years of expertise in condition monitoring

Our latest development sets new standards in condition monitoring. With over two decades of experience, we offer solutions that are not only technically advanced but also proven in practice. With BLADEcontrol® NXT, we now offer you our newest innovation. Take advantage of our years of experience and benefit from our innovative solutions for your business.

We would be happy to present the newest generation of BLADEcontrol® to you in more detail.

We look forward to a dialogue with you!



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