HubOne

Pitch Bearing condition monitoring

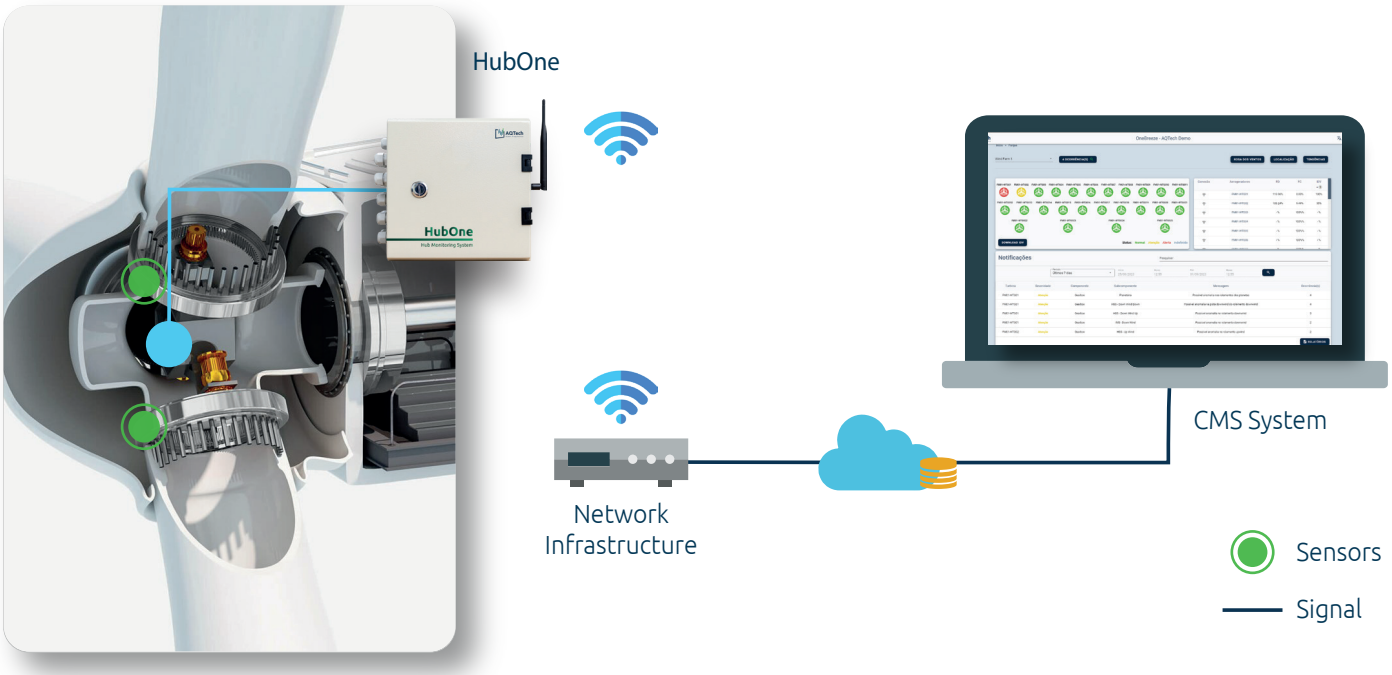
Pitch Monitoring System

AQTech
Power Prognostics

HubOne

HubOne is an innovative and compact solution designed by AQTech for online monitoring and early detection of defects in wind turbine pitch components. It combines sensors, compact hardware, and highly intuitive software.

Architecture



Failures in wind turbine pitch systems are among the leading causes of downtime and can have catastrophic consequences. This is because they experience numerous cycles of loading and stress due to varied operating conditions.

- Insights for condition-based maintenance.
- Intuitive software interface for diagnosis.
- Reduces the risk of unplanned downtime and catastrophic failures in the blades.
- Easy installation and integration.

ANATEL 05779-25-13652

RoHS compliant

AQTech Power Prognostics is ISO 9001:2015 certified by RINA, for its quality management system.

All specifications are at room temperature unless otherwise specified.
In the interest of constant product improvement, we reserve the right to change specifications without notice.

sales@aqtech.com
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AQTech Power Prognostics

Hardware

Scan the code to get in touch and hire our services!

The HubOne platform is based on a compact hardware with analog channels, specially developed for the application. The continuous and combined acquisition of proximity and electrical current sensors allows for the collection of the necessary data for diagnosis in the OneBreeze software.

Basic Specifications

Supported Sensors	2 proximity sensors per blade (6 total)
Power Supply	24 V DC
Power Consumption:	3 W (max.)
Storage	Internal Memory: 32 MB
Communication	Integrated Wi-Fi with 4G Router or Ethernet in the Nacelle

Environmental Specifications

Operating Temperature	-20ºC + 70ºC
Storage Temperature	-40ºC + 85ºC
Protection Grade	IP65

Mechanical Specifications

Dimensions	310 x 250 x 200mm
Weight	2kg

Software

The hub component analysis tool, integrated into OneBreeze, features advanced algorithms to monitor clearances between the inner and outer races of blade bearings and detect potential issues in blade fastening.

- Detection of loosening between the blades and the hub;
- Monitoring of wear and faults in the Pitch bearings;

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Contact us and learn more about how **HubOne** can enhance the reliability of your wind assets

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