

Wind turbines

A reliable wind turbine is a wind turbine with reliable signal conditioning.

The need for reliable signal conditioning modules for wind power production increases steadily because wind turbines get bigger and are increasingly placed at sea. Here are some examples of how PR electronics contributes to keeping the wind turbines fit.

STATEMENT FROM THE WIND TURBINE INDUSTRY

Henrik Bredtoft Jacobsen, kk-electronic a/s, Denmark:

"In our production of control panels for the wind turbine industry we use several different modules from PR electronics. We have chosen PR electronics as our supplier because of the high supply security and product quality. The products are easy to program and their high reliability makes them very well suited for wind turbines; - this reliability is even more important at offshore wind farms as maintenance here is extremely costly."

f/l conversion and l/f conversion

f/l conversion of pulse signals from anemometer with f/l-f/f converter 5223 or 5225.

l/f conversion of analog signals from anemometer with l/f converter 4222.

Signal isolation

Signal isolation (generator etc.) with transmitter 4114 or isolator 2284 / 5104.

Speed monitoring

Speed monitoring (gear box etc.) with trip amplifier 2231.

Pitch control and pitch adjustment

Pitch control of proportional valve with valve controller 2224.

Pitch adjustment of wings with signal controller 2286 or 2289.

Temperature measurement

Temperature measurement (oil in gear case and bearings) with transmitter 5331, 4114 or 5114.

Temperature measurement with transmitter 4114, 5331 or 5131 during casting and hardening of wings.

Stress measurement

Stress measurement (wings and tower) with load cell amplifier 2261.

Anemometer
High voltage transformer

Generator
Generator cooler

Brake
Yaw gears
Coupling

Oil cooler

Rotor lock system

Blade bearing

Blade hub

Hub controller
Pitch cylinders

Hydraulic block

Shaft

Bearing

Gear box

Robust signal conditioning

PR electronics offers you signal conditioning modules that, due to their high EMC immunity, continue to operate unaffected in the presence of frequency converters and generators.

