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AQ510 Wind Finder

The AQ510 Sodar present one of the highest quality remote sensing solutions in a reliable and cost effective package. To ensure the high level of performance cost efficiency the Sodar includes the following…

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Specifications

Measurement range	40 - 200m (optional 300m)
Height resolution	5m
No of measurement heights	33
Accuracy horizontal wind speed	±2%
Data availability	>98%@100m, >92%@150m, >85%@200m
Wind speed range	0 to 40 m/s
Mean value period	10 min
Transmitting frequency	4 300 Hz (optional 3 144 Hz)
Operating temperature range	-40 to 60°C
Operating humidity range	0 to 100% RH
Data transfer	GPRS standard, opt Satellite
Power consumption	30W

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Met mast verification

Every AQ510 instrument is verified against a 103m met mast with traditional anemometry prior to delivery.

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IEC Classification

The AQ510 instrument is classified according to the IEC 61400-12-1. Full classification report available on request.

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Low power consumption

Efficient electronics, software and power amplifier limit the power consumption to 30W. Reduced power requirements result in better fuel economy reduced operating costs and lower carbon footprint

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Turbulence data availability

The turbulence data availability at a level where data can be used for a valid site assessment. The turbulence data for AQ510 is at an astounding 98% at 100m.

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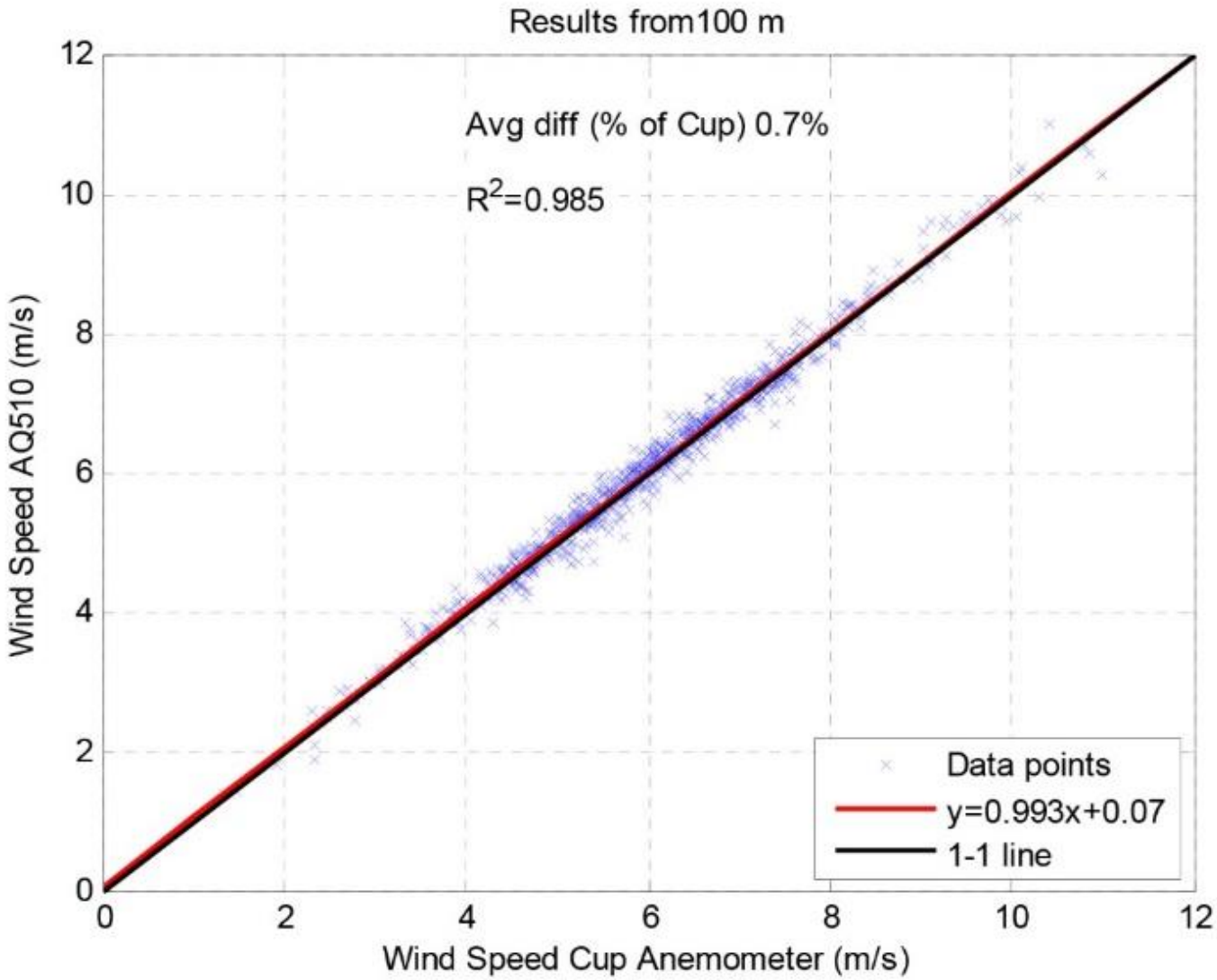
Wind calculation

The wind calculation algorithm used in AQ510 is developed using multiple data series and echo recordings. All this to optimize the use of mathematical models and processes to select valid data and define wind speed, wind direction and more.



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Number of measurement cycles

The number of measurement cycles is one of the factors to obtain a good correlation with a met mast. The high number of measurement cycles increase the validity of the AQ510 Measurements.

AQ510 performs 111 cycles per 10 minutes.

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Cold winter measurements

Automatically activated snow and ice melting, dual-heaters and pre-heating of generator allows the AQ510 Cold Winter to measure in the coldest of climates.

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Extended range option

With turbine hub heights and rotor diameter increasing, measurement height needs to increase. The AQ510 has the option to measure up to 300 meters.

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Diesel leak protection

The AQ510 Cold Winter kit has the option to include a safety device that, in case of leakage, drains the diesel to a separate tank. The area under the diesel generator is sealed to make sure potential spillage is directed through a drain hole into a separate tank located under the trailer. This is to protect the environment from harm.

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Fire protection

To prevent damage to the product and the environment the AQ510 Cold Winter has the option to add a fire protection kit.

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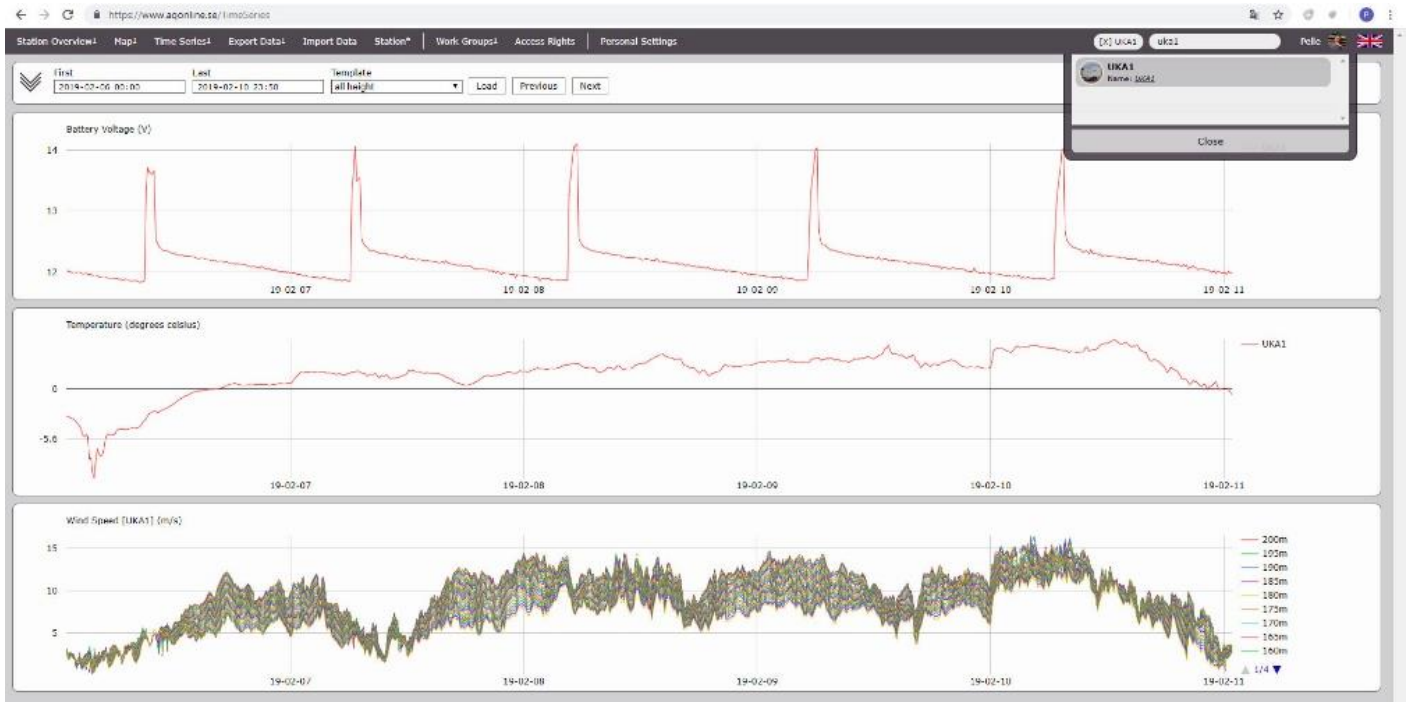
AQOnline web interface

All AQ510 systems are equipped with AQOnline web interface communication components to allow data access and condition monitoring though AQSystem web portal from any device.



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AQ510 Wind Finder technology that works