



# ZX 300

## Accurate, reliable and fast onshore wind measurements from vertical profiling Lidar.

Accepted by DNV as a Stage 3 Bankable Lidar in simple terrain and by Deutsche WindGuard in complex terrain. Full IEC Classification, the single largest body of evidence of met mast / Lidar validations at the UK Remote Sensing Test Site and gold-standard 'highest height' validations at 213m and 244m.

### ZX 300 at a glance:

- Remotely measure the wind from 10 to 300 metres above ground.
- Reduce your measurement uncertainty by measuring higher than a met mast and by mobilising measurements across a whole site.
- Better manage health & safety requirements on site with no need to work at height.
- Be flexible within your planning applications by using a low visual impact, low height device.
- Start your measurement campaign tomorrow with little or no site preparation or planning permits required.
- ZX 300 is fully IEC Classified to IEC 61400-12-1: 2017.



# The most validated ground-based wind Lidar in the world, and to the highest heights

A sophisticated, rugged system, highly reliable, designed and built to perform in real world deployments, clean air and extreme environments.

Absolute accuracy demonstrated through wind tunnel testing.

Accepted by all leading wind consultants for energy assessments and site prospecting including DNV Stage 3 approved finance-grade data in benign terrain, and Deutsche WindGuard approved CFD conversions for finance-grade data in complex terrain.

Low cost of ownership with no requirement for annual servicing or calibration within a 3 year period.

**ZX 300 is the mid-life upgrade of our established ZephIR 300 wind Lidar.**

**Features include:**

- Modernised internal components. These benefits are realised through increased in-field performance and long-term serviceability. ZX 300 is provided as standard with an extensive 36 month return-to-base warranty – the longest of any Lidar.
- Refreshed User Interface. Additional contrast modes and streamlined menu systems promote easier navigation when deploying and configuring ZX 300.
- Performance Verification through our rigorous and audited Factory Acceptance Test as standard.
- Real-time Quality Controlled 1-second data. This new best-in-class resolution of wind data enables emerging Lidar applications within the wind, meteorological and associated industries such as crane lifts and helicopter operations. No other Lidar provides a full 360° wind field calculation derived from just one second of data.

In addition, ZX 300 features optimised processing for improved wind data quality control. Extensive field demonstrations have been performed on ZX 300 at the UK Remote Sensing Test Site. The analysis of these deployments spanning several years over all seasons and weather conditions delivers results showing excellent performance and a step forward in the existing accuracy that is considered Stage 3, suitable for standalone wind energy assessments, by DNV. ZX 300 is fully IEC Classified to IEC 61400-12-1: 2017.

**Take confidence from our extensive 5 year ZX Care Warranty**

## ZX300 Specification

### Measurements

<b>Range</b>	10 - 300 metres (Lidar measurement) 0 - 10 metres (onboard met weather station)
<b>Probe length</b>	± 0.07 metres @ 10 metres ± 7.70 metres @ 100 metres
<b>Heights measured</b>	10 User configurable 1 Additional met weather station measurement
<b>Sampling rate</b>	50Hz (up to 50 measurement points every second)
<b>Averaging rate</b>	True 1-second averaging 10-minute averaging
<b>Accuracy wind speed</b>	0.1 m/s*
<b>Direction variation</b>	< 0.5°
<b>Speed Range</b>	< 1 m/s to 80 m/s
<b>Data storage</b>	3Gb

### Product

<b>Service interval</b>	5 years from new
<b>Size</b>	900 x 900 x 1001mm
<b>Weight</b>	55kg
<b>IP Rating</b>	IP 67
<b>Power consumption</b>	55W
<b>Power input</b>	12V
<b>Temperature range</b>	-40 + 50°C
<b>Warranty</b>	Up to 5 years
<b>Maintenance</b>	No annual maintenance or calibration in this period
<b>Laser</b>	Class 1, Eye Safety (IEC 60825-1)

\* as measured against calibrated moving target