Wind speed at light speed



Product Guide 2018





Onshore wind measurements from vertical profiling Lidar

Full IEC Classification and new 200m Lidar comparison results available from the UK Remote Sensing Test Site. The longest service and warranty period as standard of any Lidar. Accepted by DNV GL as a Stage 3 Bankable Lidar.

ZX 300 at a glance:

- Remotely measure the wind from 10 to 200+ 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 614100-12-1: 2017.



The original wind industry Lidar, with the highest number of IEC compliant met mast validations

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

Absolute accuracy demonstrated through wind tunnel testing.

DNV GL Stage 3 approved finance-grade data in benign terrain.

Validated, documented and audited CFD conversion 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 represents a mid-life upgrade of our established ZephIR 300 wind Lidar, originally launched in 2011. New 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.
- 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.
- Refreshed User Interface. Additional contrast modes and streamlined menu systems promote easier navigation when deploying and configuring ZX 300.
- Performance Verification against Golden Lidar provided as standard.

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, with analysis of deployments spanning several years over all seasons and weather conditions with 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 GL. ZX 300 is fully IEC Classified to IEC 614100-12-1: 2017.

Take confidence from our 3 year ZX Care Warranty and Service Interval

2X300 Specification

Measurements

Range	10 - 200 metres (Lidar measurement)0 - 10 metres (onboard met weather station)
Probe length	± 0.07 metres @ 10 metres ± 7.70 metres @ 100 metres
Heights measured	10 User configurable 1 Additional met weather station measurement
Sampling rate	50Hz (up to 50 measurement points every second)
Averaging rate	True 1-second averaging 10 Minute averaging
Accuracy wind speed	0.1 m/s*
Direction variation	< 0.5°
Speed Range	< 1 m/s to 80 m/s

Product

Service interval	36 months from new
Size	900 x 900 x 1001mm
Weight	55kg
IP Rating	IP 67
Power consumption	69W
Power input	12V
Temperature range	-40 + 50°C
Warranty	3 years
Maintenance	No annual maintenance or calibration in this period

^{*} as measured against calibrated moving target

ZXLidars.com

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ZX Lidars is a registered trademark of Zephir Ltd., a registered company (SC317594) in Scotland. Our Registered Office is The Greenhouse, Dalry, Castle Douglas, DG7 3XS, UK. Registered No. SC317594. VAT No. GB243692648

