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## PRESS RELEASE

*For immediate release*

### **WINDCUBE BECOMES WORLD'S FIRST LIDAR DEVICE TO ACHIEVE FULL IEC 61400-12-1 ED2 2017 COMPLIANCE WITH INDEPENDENT THIRD-PARTY CLASSIFICATIONS**

*Paris, France 18<sup>th</sup> June 2018.* **Leosphere has announced that Windcube, its ground-based Lidar, has successfully met the full conditions for the IEC 61400-12-1 ed2 2017 standard.**

The IEC 61400 12 1, ed. 2 [1] standard sets a scheme to assess the uncertainty of remote sensing devices (RSDs), involving a calibration test for every unit and a classification for every type of instrument. The calibration gauges the accuracy of measurements in the context of prevailing environmental conditions during the test, and the extent to which this calibration may be affected by other environmental conditions on other occasions. To assess the influence of these changing conditions on the accuracy of the RSD, a sensitivity analysis or classification is needed in which the deviation between the RSD and reference mast measurements is analysed with regard to different environmental variables.

The conditions of the standard require measurements on at least two different units, and one unit at two different sites – in other words, at least three measurements – in order to assess sensitivity to the environmental parameters. In the classification exercise, which was conducted independently by Deutsche WindGuard Consulting GmbH, Windcube achieved all three classifications, meaning it is now fully compliant with the standard.

#### **Test results**

The testing exercise took into account four significant and independent variables: wind shear, turbulence intensity, wind direction and precipitation. Measurements were taken at five-meter intervals at heights ranging from 40 metres to 135 metres.

Accuracy classes of 2.7 to 4.2 were calculated, but Deutsche WindGuard noted that the actual uncertainty will usually be smaller than these numbers would indicate. For example, for measurements taken at a height of 135m, the resulting standard uncertainty from the classification was between 0.6% and 1.0%.

Deutsche WindGuard also reported that its experience of regularly calibrating Windcube devices at its test station “confirms a high consistency between individual units of this type.”

“Completing the three third-party IEC classifications,” said Peter Spencer, Chief Marketing Officer (CMO) for Leosphere, “marks the final step in the journey of the Windcube towards complete legitimacy for power performance testing in accordance with IEC-12. It closes any remaining debate about whether Windcube Lidar technology is appropriate and adequate for this application. To the best of our knowledge, Windcube is the only Lidar in the market so far to have achieved this classification.”

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Press Release available in PDF format here: [\[insert hyperlink\]](#)

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**NOTE TO EDITORS:**

**About**

**LEOSPHERE**

LEOSPHERE, founded in 2004, is the world leader in ground-based and nacelle-mounted LIDAR (Light Detection and Ranging) for atmospheric observation. The company designs, develops, manufactures, sells and services remote-sensing instruments for precise accurate wind measurement and aerosol characterization. LEOSPHERE has deployed over a thousand LIDARs throughout the world. [www.leosphere.com](http://www.leosphere.com)

**For more information please contact:**

Laurie BERTHIER, Communications Manager, Leosphere [lberthier@leosphere.com](mailto:lberthier@leosphere.com)

Adela GIURCAU, Marketing Manager, Leosphere, [agiurcau@leosphere.com](mailto:agiurcau@leosphere.com)