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**Calibration Specification of Magnetoelectricity Wind Sensor for
Wind Farm
(English Translation)**

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Introduction

This specification based JJF 1071-2010 "national measurement calibration specifications write rules" written specification of general purpose in line with the amount of term JJF 1001-2011 "common measurement terms and definitions", uncertainty of measurement is given in Appendix Evaluation

Example based JJF 1059.1-2012 "Evaluation and Expression of Uncertainty in Measurement" in.

This specification metrological characteristics of repeatability, linearity and hysteresis are cited GB/T 18459-2001 "main sensor to define the calculation of static performance ", but because of the amount of wind speed in practice usually absolute amount, so the Specification metrological characteristics calibration results are given in absolute values for each parameter for each calibration point.

The specification range of the calibration and measurement characteristics Reference Technical indicators cited GB/T 18709-2002 "Wind Power Field wind resource measurement method "in the relevant parameters.

This specification is the first release.

Wind Farm wind speed sensor with magnetic Calibration Specification

1 Scope

This instruction applies to wind farms with wind speed magnetic sensor (hereinafter referred to as wind speed sensor) 3m/s ~ 30m/s Calibration range.

2. References

JJF 1001-2011 common measurement terms and definitions GB/T 7665-2005 sensor generic term GB/T 18459-2001 sensor is mainly static performance index calculation method GB/T 18709-2002 wind energy resource measurement method for dated references, only the dated edition applies to this specification; undated reference documents Member, the latest edition (including any amendments) applies to this specification.

3 terminology and units of measurement

3.1 Terms

3.1.1 Pitot probes pitot-statichead Pitot tube and static pressure hole Total hole where the measuring end.

3.1.2 blockage ratio Test section of the instrument (including mounting bracket) ratio of the area of the wind flow field uniformity test section of the cross-sectional area.

3.1.3 Flow field uniformity area uniformspaceofvelocity Within the test section in line with the uniformity of the flow rate and other technical indicators of the region.

3.2 units of measurement Winds from the sensor output frequency measurement unit Hertz, Hz.

4 Overview

Wind Farm wind speed magnetic-electric sensors are used to evaluate wind energy wind

farm construction before. Winds from the main sensor package Including rotating part and the magnetic induction and the signal output section. In part by a rotation of 120° to each other trigeminal star bracket and Three hollow glass composition, the stent design of the rotary shaft and the center of the mounting bar (or sleeve). Magnetic induction and the signal output unit the main points include coils and permanent magnets. Under the impetus of the wind cup wind torsion torque is applied in turn, rotates relative to the magnet wire Revolutions, induced in the coil produces a continuous function of the wind speed of approximately sinusoidal signal.

5 Metrological characteristics

5.1 Measurement error

5.2 Repeatability