

INTERNATIONAL ELECTROTECHNICAL COMMISSION
COMMISSION ÉLECTROTECHNIQUE INTERNATIONALE

IEC 61400-12-1
Edition 3.0 2022-09

IEC 61400-12-1
Édition 3.0 2022-09

WIND ENERGY GENERATION SYSTEMS
Part 12-1: Power performance measurements
of electricity producing wind turbines

SYSTÈMES DE GÉNÉRATION D'ÉNERGIE
ÉOLIENNE
Partie 12-1: Mesurages de performance de
puissance des éoliennes de production
d'électricité

CORRIGENDUM 1

Corrections to the French version appear after the English text.

Les corrections à la version française sont données après le texte anglais.

4 Symbols, units and abbreviated terms

Replace the lines

$c_{RH,i}$ sensitivity factor for relative humidity in bin i

T_i average temperature in bin i

ρ_i average air density in bin i

Φ relative humidity (range 0 % to 100 %)

Φ_i average relative humidity (range 0 % to 100 %) in bin i

with

$c_{RH,i}$ sensitivity factor for relative humidity in bin i [W / %RH]

T_i average temperature in bin i [K]

ρ_i average air density in bin i [kg/m³]

Φ relative humidity (range 0 % to 100 % or 0 to 1)

Φ_i average relative humidity (range 0 % to 100 % or 0 to 1) in bin i

Annex D – Evaluation of uncertainty in measurement

In Table D.1, under "Wind speed (cup and sonic anemometer)", add "Lightning finial" in the second column and "B" in the last column.

Annex E – Theoretical basis for determining the uncertainty of measurement using the method of bins

E.5 Category B uncertainties: Power output

E.5.1 General

Replace the fourth paragraph starting with "Further, an uncertainty component due to the dynamic behaviour"

with

"Finally the uncertainty related to the data acquisition of the power signal shall be added."

E.9 Category B uncertainties: Wind speed – Terrain

E.9.1 General

Replace the sixth paragraph

In this case this uncertainty component related to the terrain has nine sub-components

with

In this case this uncertainty component related to the terrain has ten sub-components.

Add the following new item to the list:

- j) uncertainty related to the lightning finial.

E.10.2 Category B uncertainties: Air density – Temperature – Introduction

After Equation (E.17), replace

v_i is the average wind speed in bin i ;

with

v_i is the average wind speed in bin i , site-calibrated and normalized for air density, shear, veer, and/or turbulence, as the case may be;

Add, after the definition of terms for Equation (E.17), the following new note:

NOTE 1 Units are defined in Clause 4.

After Equation (E.18), replace

P_i is the sensitivity factor for wind speed in bin i ;

with

P_i is the normalized and averaged power output in bin i ;

Add, after the definition of terms for Equation (E.18), the following new note:

NOTE 2 Units are defined in Clause 4.