

INTERNATIONAL ELECTROTECHNICAL COMMISSION
COMMISSION ÉLECTROTECHNIQUE INTERNATIONALE

IEC 61000-4-30
Edition 4.0 2025-10

Electromagnetic compatibility (EMC) -
Part 4-30: Testing and measurement
techniques - Power quality measurement
methods

IEC 61000-4-30
Edition 4.0 2025-10

Compatibilité électromagnétique (CEM) -
Partie 4-30: Techniques d'essai et de
mesure - Méthodes de mesure de la qualité
de l'alimentation

CORRIGENDUM 1

Corrections to the French version appear after the English text.

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

Sample Document

Introduction to the corrigendum

During the final editing of the text for IEC 61000-4-30:2025 (Edition 4), some characters and mathematical expressions were corrupted due to the use of different text editor versions.

As a result, some subclauses include missing characters which may lead to confusion or wrong interpretation of the measurement method associated to some power quality parameters.

This corrigendum is intended to restore the missing characters, to harmonize the notation of the mathematical expressions along the subclauses, and to fix minor typos, grammar errors, and erroneous references between clauses or to other documents.

5.12.1 General

Replace the fourth paragraph (after Note 3) with the following:

A voltage transition is classified as an RVC only if the absolute value of the difference ΔU_{SS} between consecutive steady-state RMS values is greater than a value ΔU_{SS_min} set by the user as a percentage (0 % to 100 %) of the RVC threshold Θ . A value of 0 % disables the ΔU_{SS_min} checking and should be the default, unless set to a different value by the user.

5.12.2.1 Single-phase RVC detection

Replace, in Class A, in the second paragraph, in the second bullet, Formula (4) with the following:

$$S = \begin{cases} \text{true} & \text{when } \forall U_{\text{rms}(\frac{1}{2})} \in \mathbb{U} : U_{\text{rms}(\frac{1}{2})} \in [U_{\text{mean}} - \Theta, U_{\text{mean}} + \Theta] \\ \text{false} & \text{otherwise} \end{cases} \quad (4)$$

Replace, in Class A, in the fourth paragraph, in the second bullet, Formula (5), Formula (6) and Formula (7) with the following:

$$S(t) = \begin{cases} \text{false} & \text{when } C_{\text{US}}(t) \\ \text{true} & \text{when } C_{\text{SS}}(t) \wedge \neg C_{\text{US}}(t) \\ S(t-1) & \text{otherwise} \end{cases} \quad (5)$$

$$C_{\text{US}}(t) = \begin{cases} \text{true} & \text{when } \forall U_{\text{rms}(\frac{1}{2})}(t) \in [U_{\text{mean}}(t-2) - \Theta, U_{\text{mean}}(t-2) + \Theta] \\ \text{false} & \text{otherwise} \end{cases} \quad (6)$$

$$C_{\text{SS}}(t) = \begin{cases} \text{true} & \text{when } \forall i \in [t-N, t] : U_{\text{rms}(\frac{1}{2})}(i) \in [U_{\text{mean}}(t) - (\Theta - \varepsilon), U_{\text{mean}}(t) + (\Theta - \varepsilon)] \\ \text{false} & \text{otherwise} \end{cases} \quad (7)$$

5.12.3.1 General

Replace the text with the following:

An RVC event is characterized by four parameters: start time, duration, ΔU_{max} and ΔU_{SS} .

D.6.2 DFT window design

Replace Table D.1 with the following:

Table D.1 – Band A IF filter impulse response zero-crossing times

i	$t_{Z,i}$ (ms)	T_{DFT} (ms)	i	$t_{Z,i}$ (ms)	T_{DFT} (ms)
1	10,113 725	not compliant	4	31,660 060	not relevant
2	17,387 926	20	5	38,760 317	40
3	24,542 897	30	6	45,851 541	50

D.7.6 RMS-average detector

Replace Formula (D.25) with the following:

$$N = \left\lceil \frac{T_c}{T_{sbb}} + 0,5 \right\rceil \quad (D.25)$$

D.10.3.1 General

Replace, in the 11th paragraph, the text with the following:

The reference values for the response of the quasi-peak instrument to impulses are provided in CISPR 16-1-1:2019, Table 5 and Table 6. These values are converted to absolute voltage levels in Table D.5 below.

D.11.1 General

Replace Formual (D.31) with the following:

$$T_{sbb} \ll \frac{2}{B_6} \quad (D.31)$$

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