

<b>STN</b>	<b>Elektrická bezpečnosť v nízkonapäťových rozvodných sieťach so striedavým napätím do 1 000 V a s jednosmerným napätím do 1 500 V Zariadenia na skúšanie, meranie alebo sledovanie činnosti prostriedkov ochrany Časť 12: Zariadenia na meranie a sledovanie spôsobilosti (PMD) Zmena A1</b>	<b>STN EN IEC 61557-12/A1</b>  35 6230
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Electrical safety in low voltage distribution systems up to 1 000 V AC and 1 500 V DC - Equipment for testing, measuring or monitoring of protective measures - Part 12: Power metering and monitoring devices (PMD)

Táto norma obsahuje anglickú verziu európskej normy.  
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 03/22

STN EN IEC 61557-12 z apríla 2022 sa bez tejto zmeny A1 môže používať do 10. 11. 2026.

Obsahuje: EN IEC 61557-12:2022/A1:2022, IEC 61557-12:2018/AMD1:2021

**134541**



EUROPEAN STANDARD

**EN IEC 61557-12:2022/A1**

NORME EUROPÉENNE

EUROPÄISCHE NORM

January 2022

ICS 17.220.20; 29.080.01; 29.240.01

English Version

**Electrical safety in low voltage distribution systems up to 1 000 V  
AC and 1 500 V DC - Equipment for testing, measuring or  
monitoring of protective measures - Part 12: Power metering and  
monitoring devices (PMD)  
(IEC 61557-12:2018/A1:2021)**

Sécurité électrique dans les réseaux de distribution basse tension jusqu'à 1 000 V c.a. et 1 500 V c.c. - Dispositifs de contrôle, de mesure ou de surveillance de mesures de protection - Partie 12: Dispositifs de comptage et de surveillance du réseau électrique (PMD)  
(IEC 61557-12:2018/A1:2021)

Elektrische Sicherheit in Niederspannungsnetzen bis AC 1 000 V und DC 1 500 V - Geräte zum Prüfen, Messen oder Überwachen von Schutzmaßnahmen - Teil 12: Geräte zur Energiemessung und -überwachung (PMD)  
(IEC 61557-12:2018/A1:2021)

This amendment A1 modifies the European Standard EN IEC 61557-12:2022; it was approved by CENELEC on 2021-06-25. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this amendment the status of a national standard without any alteration.

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This amendment exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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European Committee for Electrotechnical Standardization  
Comité Européen de Normalisation Electrotechnique  
Europäisches Komitee für Elektrotechnische Normung

**CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels**

**EN IEC 61557-12:2022/A1:2022 (E)****European foreword**

The text of document 85/755/FDIS, future IEC 61557-12/A1, prepared by IEC/TC 85 "Measuring equipment for electrical and electromagnetic quantities" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 61557-12:2022/A1:2022.

The following dates are fixed:

- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2022-07-07
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2026-11-10

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This document has been prepared under a Standardization Request given to CENELEC by the European Commission and the European Free Trade Association.

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**Endorsement notice**

The text of the International Standard IEC 61557-12:2018/A1:2021 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following notes have to be added for the standards indicated:

IEC 60688            NOTE    Harmonized as EN 60688

IEC 61869 (series)    NOTE    Harmonized as EN IEC 61869 (series)



IEC 61557-12

Edition 2.0 2021-05

# INTERNATIONAL STANDARD

# NORME INTERNATIONALE

AMENDMENT 1  
AMENDEMENT 1

**Electrical safety in low voltage distribution systems up to 1 000 V AC and 1 500 V DC – Equipment for testing, measuring or monitoring of protective measures –**

**Part 12: Power metering and monitoring devices (PMD)**

**Sécurité électrique dans les réseaux de distribution basse tension jusqu'à 1 000 V en courant alternatif et 1 500 V en courant continu – Dispositifs de contrôle, de mesure ou de surveillance de mesures de protection –**

**Partie 12: Dispositifs de comptage et de surveillance du réseau électrique (PMD)**



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IEC 61557-12

Edition 2.0 2021-05

# INTERNATIONAL STANDARD

# NORME INTERNATIONALE

AMENDMENT 1  
AMENDEMENT 1

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**Electrical safety in low voltage distribution systems up to 1 000 V AC and  
1 500 V DC – Equipment for testing, measuring or monitoring of protective  
measures –  
Part 12: Power metering and monitoring devices (PMD)**

**Sécurité électrique dans les réseaux de distribution basse tension jusqu'à  
1 000 V en courant alternatif et 1 500 V en courant continu – Dispositifs de  
contrôle, de mesure ou de surveillance de mesures de protection –  
Partie 12: Dispositifs de comptage et de surveillance du réseau électrique (PMD)**

INTERNATIONAL  
ELECTROTECHNICAL  
COMMISSION

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ELECTROTECHNIQUE  
INTERNATIONALE

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ICS 17.220.20; 29.080.01; 29.240.01

ISBN 978-2-8322-9662-2

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

**ELECTRICAL SAFETY IN LOW VOLTAGE DISTRIBUTION  
SYSTEMS UP TO 1 000 V AC AND 1 500 V DC –  
EQUIPMENT FOR TESTING, MEASURING OR  
MONITORING OF PROTECTIVE MEASURES –****Part 12: Power metering and monitoring devices (PMD)****AMENDMENT 1****FOREWORD**

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Amendment 1 to IEC 61557-12:2018 has been prepared by IEC technical committee 85: Measuring equipment for electrical and electromagnetic quantities.

The text of this amendment is based on the following documents:

FDIS	Report on voting
85/755/FDIS	85/764/RVD

Full information on the voting for its approval can be found in the report on voting indicated in the above table.



IEC 61557-12:2018/AMD1:2021  
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The language used for the development of this Amendment is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at [www.iec.ch/members\\_experts/refdocs](http://www.iec.ch/members_experts/refdocs). The main document types developed by IEC are described in greater detail at [www.iec.ch/standardsdev/publications/](http://www.iec.ch/standardsdev/publications/).

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- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

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## 1 Scope

*Replace the existing text of this clause by the following new text:*

This part of IEC 61557 specifies requirements for power metering and monitoring devices (PMD) that measure and monitor the electrical quantities within electrical distribution systems, and optionally other external signals. These requirements also define the performance of PMD in single- and three-phase AC or DC systems having rated voltages up to 1 000 V AC or up to 1 500 V DC.

These devices are fixed or portable. They are intended to be used indoors and/or outdoors.

Power metering and monitoring devices (PMD), as defined in this document, give additional safety information, which aids the verification of the installation and enhances the performance of the distribution systems.

Additionally, this document specifies requirements for measurement functions dedicated to metering and monitoring of electrical parameters called power metering and monitoring function (PMF) which can be embedded in equipment (EPMF) that is not classified as PMD and for which the main function is not power metering and monitoring.

Requirements for power metering and monitoring function (PMF) and additional requirements for equipment embedding power metering and monitoring function (EPMF) are described in Annex H.

The power metering and monitoring devices (PMD) for electrical parameters described in this document are used for general industrial and commercial applications.

The power metering and monitoring devices (PMD) can be associated with sensing devices such as but not limited to instruments transformers compliant to IEC 61869 series of standards or with transducers compliant to IEC 60688.

This document does not address functional safety and cyber security aspects.

This document is not applicable to:

- electricity metering equipment that complies with IEC 62053-21, IEC 62053-22, IEC 62053-23 and IEC 62053-24. Nevertheless, uncertainties defined in this document for active and reactive energy measurement are derived from those defined in IEC 62053 (all parts);
- the measurement and monitoring of electrical parameters defined in IEC 61557-2 to IEC 61557-9 and IEC 61557-13 or in IEC 62020;
- power quality instrument (PQI) according IEC 62586 (all parts);
- devices covered by IEC 60051 (all parts) (direct acting analogue electrical measuring instrument).

NOTE 1 Generally such types of devices are used in the following applications or for the following general needs:

- energy management inside the installation, such as facilitating the implementation of documents such as ISO 50001 and IEC 60364-8-1;
- monitoring and/or measurement of electrical parameters;
- measurement and/or monitoring of the quality of energy inside commercial/industrial installations.

NOTE 2 A measuring and monitoring device of electrical parameters usually consists of several functional modules. All or some of the functional modules are combined in one device. Examples of functional modules are:

- measurement and monitoring of several electrical parameters simultaneously;
- energy measurement and/or monitoring, as well as sometimes compliance with aspects of building regulations;
- alarms functions;
- demand side quality (current and voltage harmonics, over/under voltages, voltage dips and swells, etc.).

NOTE 3 PMD are historically called power meter, power monitor, power monitor device, power energy monitoring device, power analyser, multifunction meter, measuring multifunction equipment, energy meters.

NOTE 4 Metering, measuring and monitoring applications are explained in Annex A.

**koniec náhľadu – text ďalej pokračuje v platenej verzii STN**