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Water meters - Part 4: Additional functionalities

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

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Water meters - Part 4: Additional functionalitiesCompteurs d'eau - Partie 4 : Fonctionnalités
additionnelles

Wasserzähler - Teil 4: Zusätzliche Funktionalitäten

This European Standard was approved by CEN on 23 January 2023.

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EN 14154-4:2023 (E)

Contents		Page
European foreword.....		4
Introduction		5
1	Scope	6
2	Normative references	6
3	Terms and definitions	6
4	General requirements	8
4.1	Types of additional functionality devices and requirements	8
4.2	Connection requirements	8
4.3	Environmental conditions	8
4.4	Security	9
4.4.1	General.....	9
4.4.2	Software, data and hardware security	9
4.4.3	Firmware upgrade of AFD	9
4.4.4	Software identification.....	9
4.5	Power supply	9
4.6	Data storage	10
4.7	Clock requirements	10
4.7.1	General.....	10
4.7.2	Clock synchronisation	10
4.7.3	Clock setting.....	10
4.8	Marking.....	10
4.8.1	Requirements	10
4.8.2	Test.....	11
4.9	Documentation.....	11
4.9.1	General.....	11
4.9.2	Declaration of conformity	11
4.9.3	Instruction manual	11
4.10	Display.....	12
4.10.1	General.....	12
4.10.2	Requirements	12
4.10.3	Test.....	12
4.11	Metrological influence.....	12
4.11.1	Requirement.....	12
4.11.2	Test.....	12
4.12	Input to AFD / Output from AFD	13
4.12.1	General.....	13
4.12.2	Requirement.....	13
4.12.3	Test.....	13
5	Additional functionalities	13
5.1	General.....	13
5.2	Use cases.....	13
5.2.1	Scheduled read.....	13
5.2.2	Pre-programmed reading date	14
5.2.3	On demand read	14
5.2.4	History of consumption	14

5.2.5	Background leak	14
5.2.6	Burst	15
5.2.7	Reverse flow	15
5.2.8	Zero flow	16
5.2.9	Tamper of AFD	16
5.2.10	Tamper of meter	16
5.2.11	Battery low	16
5.2.12	Presence of air	17
5.2.13	Access profiles	17
6	Environmental considerations	17
Annex A (normative) Declaration of conformity to EN 14154-4		18
Annex B (informative) Smart Metering, overview, core functionalities and descriptions		19
B.1	General	19
B.2	M2M Gateway	19
B.3	Clusters	20
B.4	Primary Use Cases	20
B.5	Secondary Use Cases	20
B.6	Primary Actors	20
B.7	Actors	20
B.8	Use Cases	20
Annex C (informative) References to EN ISO 4064-1:2017, EN ISO 4064-2:2017, EN ISO 4064-3:2014, EN ISO 4064-4:2014, EN ISO 4064-5:2017		21
Bibliography		24

EN 14154-4:2023 (E)**European foreword**

This document (EN 14154-4:2023) has been prepared by Technical Committee CEN/TC 92 “Water meters”, the secretariat of which is held by SNV.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by September 2023, and conflicting national standards shall be withdrawn at the latest by September 2023.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 14154-4:2014.

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

Any feedback and questions on this document should be directed to the users’ national standards body. A complete listing of these bodies can be found on the CEN website.

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Introduction

This document has been developed as part of the work being undertaken by the European Standards Organizations (CEN/CENELEC/ETSI) under the Commission Mandate M/441. This document utilizes the six functionalities agreed by the Smart Meters Coordination Group (SM-CG) (see Annex B) as the basis for its additional functionalities. It is not required for the Additional Functionality Device (AFD) to incorporate all functions described in this document.

Communications for water meters are outside the scope of this document and are covered by the appropriate parts of the EN 13757 series, which provides a number of protocols and transport layers for meter communications for Gas, Water and Thermal Energy meters. The additional functionality for water meters can be provided by a number of methods; these are illustrated below, see Figure 1 (4.1), and described in detail within this document. The AFD can be integrated in the meter, attached to the meter or remote from the meter.

EN 14154-4:2023 (E)**1 Scope**

This document specifies definitions, requirements and testing of additional functionalities for water meters, without metrological impact, in combination with Additional Functionality Devices (AFD) and in response to EU/EFTA Mandate M/441 EN. These AFDs are considered as “ancillary devices” as defined in EN ISO 4064-1:2017 and EN ISO 4064-4:2014.

This document does not cover the changing of metrological software within the meter or the upload/download of metrological software.

NOTE A manufacturer can claim compliance only for additional functionalities described in this document. It is not mandatory that an AFD complies with all additional functionalities described herein.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN ISO 4064-1:2017, *Water meters for cold potable water and hot water - Part 1: Metrological and technical requirements (ISO 4064-1:2014)*

EN ISO 4064-2:2017, *Water meters for cold potable water and hot water - Part 2: Test methods (ISO 4064-2:2014)*

EN ISO 4064-4:2014, *Water meters for cold potable water and hot water - Part 4: Non-metrological requirements not covered in ISO 4064-1 (ISO 4064-4:2014)*

EN ISO 4064-5:2017, *Water meters for cold potable water and hot water - Part 5: Installation requirements (ISO 4064-5:2014)*

EN 60529:1991, *Degrees of protection provided by enclosures (IP Code)*

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