

Irish Standard I.S. EN 1434-3:2015

Heat meters - Part 3: Data exchange and interfaces

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#### I.S. EN 1434-3:2015

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This document is based on:

Published:

EN 1434-3:2015

2015-12-02

This document was published under the authority of the NSAI

ICS number:

and comes into effect on:

17.200.10

2015-12-20

NOTE: If blank see CEN/CENELEC cover page

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### **National Foreword**

I.S. EN 1434-3:2015 is the adopted Irish version of the European Document EN 1434-3:2015, Heat meters - Part 3: Data exchange and interfaces

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**EUROPEAN STANDARD** 

EN 1434-3

NORME EUROPÉENNE

**EUROPÄISCHE NORM** 

December 2015

ICS 17.200.10

Supersedes EN 1434-3:2008

### **English Version**

## Heat meters - Part 3: Data exchange and interfaces

Compteurs d'énergie thermique - Partie 3 : Échange de données et interfaces

Wärmezähler - Teil 3: Datenaustausch und Schnittstellen

This European Standard was approved by CEN on 27 September 2015.

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This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN 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 foreword**

This document (EN 1434-3:2015) has been prepared by Technical Committee CEN/TC 294 "Communication systems for meters", the secretariat of which is held by DIN.

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of an identical text or by endorsement, at the latest by June 2016, and conflicting national standards shall be withdrawn at the latest by June 2016.

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

This document supersedes EN 1434-3:2008.

The following significant editorial changes compared to the previous edition have been incorporated in this European Standard:

- a) update of normative references;
- b) update of Table 1 "Possible combinations of interfaces and standards";
- c) addition of explanations to Table B.1 "Values for "UU", register codes".

EN 1434 consists of the following parts, under the general title "Heat meters":

- Part 1: General requirements
- Part 2: Constructional requirements
- Part 4: Pattern approval tests
- Part 5: Initial verification tests
- Part 6: Installation, commissioning, operational monitoring and maintenance

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

EN 1434-3:2015 (E)

### 1 Scope

This European Standard specifies the general requirements and applies to heat meters. Heat meters are instruments intended for measuring the energy which in a heat-exchange circuit is absorbed (cooling) or given up (heating) by a liquid called the heat-conveying liquid. The meter indicates heat in legal units.

Part 3 specifies the data exchange between a meter and a readout device (POINT / POINT communication). For these applications using the optical readout head, the EN 62056-21 protocol is recommended.

For direct or remote local readout of a single or a few meters via a battery driven readout device, the physical layer of EN 13757-6 (local bus) is recommended.

For bigger networks with up to 250 meters, a master unit with AC mains supply according to EN 13757-2 is necessary to control the M-Bus. For these applications the physical and link layer of EN 13757-2 and the application layer of EN 13757-3 is required.

For wireless meter communications, EN 13757-4 describes several alternatives of walk/drive-by readout via a mobile station or by using stationary receivers or a network. Both unidirectionally and bidirectionally transmitting meters are supported by this standard.

### 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 13757-2, Communication systems for meters and remote reading of meters — Part 2: Physical and link layer

EN 13757-3:2013, Communication systems for meters and remote reading of meters — Part 3: Dedicated application layer

EN 13757-4, Communication systems for meters and remote reading of meters — Part 4: Wireless meter readout (Radio meter reading for operation in SRD bands)

EN 13757-6, Communication systems for meters — Part 6: Local Bus

EN 62056-21:2002, Electricity metering — Data exchange for meter reading, tariff and load control — Part 21: Direct local data exchange (IEC 62056-21:2002)



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