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BS EN 1434-3:2015



BSI Standards Publication

Heat meters

Part 3: Data exchange and interfaces

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This British Standard is the UK implementation of EN 1434-3:2015. It supersedes BS EN 1434-3:2008 which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee PEL/894, Remote Meter Reading.

A list of organizations represented on this committee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

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English Version

Heat meters - Part 3: Data exchange and interfaces

Compteurs d'énergie thermique - Partie 3 : Échange de
données et interfacesWärmezähler - Teil 3: Datenaustausch und
Schnittstellen

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

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
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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of an identical text or by endorsement, at the latest by June 2016, and conflicting national standards shall be withdrawn at the latest by June 2016.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.

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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)*