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English Version

Gas meters - Smart Gas Meters

Compteurs de gaz - Compteurs de gaz intelligents

Gaszähler - Intelligente Gaszähler (Smart Gas Meters)

This Technical Report was approved by CEN on 19 July 2010. It has been drawn up by the Technical Committee CEN/TC 237.

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Foreword

This document (CEN/TR 16061:2010) has been prepared by Technical Committee CEN/TC 237 "Gas meters", the secretariat of which is held by BSI.

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 is intended to be a precursor to a formal standard for Gas Meters that provide some additional functions beyond that required under the Measuring Instruments Directive (MID). It is noted that other CEN and CENELEC Technical Committees are active in the areas of metering communications – most relevant being CEN/TC 294 "Communication systems for meters and remote reading of meters", which covers automatic reading of Gas Meters in great detail. The functions described are mainly for use on Residential Utility meters, but may be equally applicable to meters used for commercial and industrial applications. A number of the requirements may be applicable to "add-on" devices to Gas Meters. However, it is outside the scope of the TC to standardise beyond Gas Metering devices.

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1 Scope

This Technical Report outlines recommendations for "smart gas meters", specifies recommendations where there is clear consensus, and identifies areas where there are barriers to standardisation. It indicates how functions may be implemented in a harmonized way if they are selected. It does not seek to select which functions are to be implemented in a smart meter. The report covers simple to complex implementations of smart metering.

This Technical Report is applicable to 1st, 2nd and 3rd family gases according to EN 437.

2 Definitions, glossary

2.1 Glossary

MID	Measuring Instruments Directive, 2004/22/EC
AtEx	"Atmospheres Explosibles". A pair of EU Directives governing hazardous areas, 99/92/EC; and the equipment that can be used within hazardous areas, 94/9/EC
CEN	European Committee for Standardization: European standards body for non-electrical equipment
CENELEC	European Committee for Electrotechnical Standardisation: European standards body for electrical equipment
BSI	British Standards Institution
DLMS UA	The Device Language Message Specification User Association
Harmonised standard	European Standard adopted by a European standardisation body, made available to the public and that has been recognised as a method to demonstrate conformity to Essential Requirements of a European Directive
PED	Pressure Equipment Directive, 97/23/EC
WELMEC	Western European Legal Metrology Cooperation: an organisation of legal metrologists
ESCO	Energy End-Use Efficiency and Energy Services Directive, 2006/32/EC
Basic Meter	a meter that is safe and provides no function beyond that required by the MID
IT System	Information Technology System
AMR	Automatic Meter Reading. A technology that allows a meter to be read that does not require direct observation of the meter
AMM	Advanced Meter Management
AMI	Advanced Meter Infrastructure
Connector	a mechanical device, or pair of devices, that makes a semi-permanent circuit between the meter and a cable