

STN	Výmena údajov pri meraní elektrickej energie Súbor DLMS/COSEM Časť 8-8: Komunikačný profil pre siete súboru ISO/IEC 14908	STN EN IEC 62056-8-8 35 6131
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Electricity metering data exchange - The DLMS/COSEM suite - Part 8-8: Communication profile for ISO/IEC 14908 series networks

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. 09/20

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English Version

Electricity metering data exchange - The DLMS/COSEM suite -
Part 8-8: Communication profile for ISO/IEC 14908 series
networks
(IEC 62056-8-8:2020)

Échange des données de comptage de l'électricité - La
suite DLMS/COSEM - Partie 8-8: Profil de communication
pour réseaux de la série ISO/IEC 14908
(IEC 62056-8-8:2020)

Datenkommunikation der elektrischen Energiemessung -
DLMS/COSEM - Teil 8-8: Kommunikationsprofil für
Netzwerke der Reihe ISO/IEC 14908
(IEC 62056-8-8:2020)

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EN IEC 62056-8-8:2020 (E)**European foreword**

The text of document 13/1783/CDV, future edition 1 of IEC 62056-8-8, prepared by IEC/TC 13 "Electrical energy measurement and control" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 62056-8-8:2020.

The following dates are fixed:

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IEC 62056-1-0 NOTE Harmonized as EN 62056-1-0

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

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.

NOTE 1 Where an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: www.cenelec.eu.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 62056-5-3	2017	Electricity metering data exchange - The DLMS/COSEM suite - Part 5-3: DLMS/COSEM application layer	EN 62056-5-3	2017
IEC 62056-6-1	2017	Electricity metering data exchange - The DLMS/COSEM suite - Part 6-1: Object Identification System (OBIS)	EN 62056-6-1	2017
IEC 62056-6-2	2017	Electricity metering data exchange - The DLMS/COSEM suite - Part 6-2: COSEM interface classes	EN IEC 62056-6-2	2018
ISO/IEC 14908-1	2012	Information technology - Control network - protocol - Part 1: Protocol stack	-	-
ISO/IEC 14908-3	2012	Information technology - Control network - protocol - Part 3: Power line channel specification	-	-
-	-	Signalling on low-voltage electrical installations in the frequency range 3 kHz to 148,5 kHz – Part 1: General requirements, frequency bands and electromagnetic disturbances	EN 50065-1	-



IEC 62056-8-8

Edition 1.0 2020-04

INTERNATIONAL STANDARD

NORME INTERNATIONALE



**Electricity metering data exchange – The DLMS/COSEM suite –
Part 8-8: Communication profile for ISO/IEC 14908 series networks**

**Échange des données de comptage de l'électricité – La suite DLMS/COSEM –
Partie 8-8: Profil de communication pour réseaux de la série ISO/IEC 14908**





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IEC 62056-8-8

Edition 1.0 2020-04

INTERNATIONAL STANDARD

NORME INTERNATIONALE



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Part 8-8: Communication profile for ISO/IEC 14908 series networks**

**Échange des données de comptage de l'électricité – La suite DLMS/COSEM –
Partie 8-8: Profil de communication pour réseaux de la série ISO/IEC 14908**

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**ELECTRICITY METERING DATA EXCHANGE –
THE DLMS/COSEM SUITE –**
Part 8-8: Communication profile for ISO/IEC 14908 series networks**FOREWORD**

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International Standard IEC 62056-8-8 has been prepared by IEC technical committee 13, Electrical energy measurement and control.

The text of this International Standard is based on the following documents:

CDV	Report on voting
13/1783/CDV	13/1792/RVC

Full information on the voting for the approval of this International Standard can be found in the report on voting indicated in the above table.

This document has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all parts in the IEC 62056 series, published under the general title *Electricity metering data exchange – The DLMS/COSEM suite*, can be found on the IEC website.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under "<http://webstore.iec.ch>" in the data related to the specific document. At this date, the document will be

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INTRODUCTION

The IEC 62056 DLMS/COSEM suite provides specific communication profile standards for communication media relevant for smart metering.

Such communication profile standards specify how the COSEM data model and the DLMS/COSEM application layer can be used on the lower communication media-specific protocol layers.

Communication profile standards refer to communication standards that are part of the IEC 62056 DLMS/COSEM suite or to any other open communication standard.

This International Standard specifies DLMS/COSEM communication profile using ISO/IEC 14908-1:2012, *Information technology – Control network protocol – Part 1: Protocol stack* and ISO/IEC 14908-3:2012, *Information technology – Control network protocol – Part 3: Power line channel specification*. It applies for devices installed on the neighbourhood area network.

It follows the rules defined in IEC 62056-5-3:2017, Annex A, and in IEC 62056-1-0, and IEC TS 62056-1-1 for its structure.

ELECTRICITY METERING DATA EXCHANGE – THE DLMS/COSEM SUITE –

Part 8-8: Communication profile for ISO/IEC 14908 series networks

1 Scope

This part of IEC 62056 describes how the DLMS/COSEM Application layer and the COSEM object model as specified in IEC 62056-5-3:2017, IEC 62056-6-1:2017 and IEC 62056-6-2:2017 can be used over the lower layers specified in the IEC 14908 series, forming a DLMS/COSEM ISO/IEC 14908 communication profile.

This document is part of the IEC 62056 series. Its structure follows IEC 62056-1-0 and IEC TS 62056-1-1.

Annex A (informative) provides examples of representative instances of data exchange.

NOTE This Annex A is included and referenced for consistency with other parts of the IEC 62056 suite, but it is empty.

Annex B (normative) defines COSEM interface classes and related OBIS codes for setting up and managing the DLMS/COSEM communication profile for IEC 14908 networks. These interface classes and OBIS codes will be moved later to IEC 62056-6-2 and IEC 62056-6-1.

Annex C (informative) provides an implementation guide and specifies a migration path from Utility Tables based applications to DLMS/COSEM based applications.

Annex D (informative) specifies the OSGP-AES-128-PSK security suite for optional use on the adaptation layer level.

Annex E (normative) specifies the repeating mechanism over the ISO 14908-3 Power Line Channel network.

Annex F (informative) specifies ISO/IEC 14908-3 Registration and monitoring of LNAPs.

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.

IEC 62056-5-3:2017, *Electricity metering data exchange – The DLMS/COSEM suite – Part 5-3: DLMS/COSEM application layer*

IEC 62056-6-1:2017, *Electricity metering data exchange – The DLMS/COSEM suite – Part 6-1: Object Identification System (OBIS)*

IEC 62056-6-2:2017, *Electricity metering data exchange – The DLMS/COSEM suite – Part 6-2: COSEM interface classes*

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ISO/IEC 14908-1:2012, *Information technology – Control network protocol – Part 1: Protocol stack*

ISO/IEC 14908-3:2012, *Information technology – Control network protocol – Part 3: Power line channel specification*

EN 50065-1, *Signalling on low-voltage electrical installations in the frequency range 3 kHz to 148,5 kHz – Part 1: General requirements, frequency bands and electromagnetic disturbances*

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