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Wireless power transfer - Management - Part 3: Multiple source control management

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# EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

EN 62827-3

March 2017

ICS 43.120

**English Version** 

# Wireless power transfer - Management -Part 3: Multiple source control management (IEC 62827-3:2016)

Transfert de puissance sans fil - Gestion -Partie 3: Gestion du contrôle de sources multiples (IEC 62827-3:2016) Drahtlose Energieübertragung - Management -Teil 3: Mehrfachquellen Steuerungsmanagement (IEC 62827-3:2016)

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The text of document 100/2604/CDV, future edition 1 of IEC 62827-3, prepared by Technical Area 15 "Wireless power transfer" of IEC/TC 100 "Audio, video and multimedia systems and equipment" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 62827-3:2017.

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# Normative references to international publications with their corresponding European publications

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| Publication | <u>Year</u> | <u>Title</u>  | <u>EN/HD</u> | <u>Year</u> |
|-------------|-------------|---|--------------|-------------|
| IEC 62827-1 | -           | Wireless power transfer - Management -<br>Part 1: Common components | EN 62827-1   | -           |



# IEC 62827-3

Edition 1.0 2016-12

# INTERNATIONAL STANDARD



Wireless power transfer – Management – Part 3: Multiple source control management





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|--------------------|------------------------|
| 3, rue de Varembé  | Fax: +41 22 919 03 00  |
| CH-1211 Geneva 20  | info@iec.ch            |
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# IEC 62827-3

Edition 1.0 2016-12

# INTERNATIONAL STANDARD



Wireless power transfer – Management – Part 3: Multiple source control management

INTERNATIONAL ELECTROTECHNICAL COMMISSION

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

# WIRELESS POWER TRANSFER – MANAGEMENT –

### Part 3: Multiple source control management

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The text of this standard is based on the following documents:

| CDV          | Report on voting |
|--------------|------------------|
| 100/2604/CDV | 100/2724/RVC     |

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

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

A list of all parts in the IEC 62827 series, published under the general title *Wireless power transfer – Management*, can be found on the IEC website.

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## INTRODUCTION

Wireless power transfer technology transmits electric power from the power source to the power-consuming device without the use of wire. The most widely used technology is electromagnetic induction technology and magnetic resonance technology. The wireless power transfer system eliminates the need for the user to connect a power cable to the electrical outlet. Through electromagnetic induction technology, users place the power-receiving device within a short distance from the power source in order to charge a battery without removing it from its device.

In parallel to this, magnetic resonance technology for wireless power transfer systems is also being developed. Magnetic resonance technology gives a spatial effect to power transfer. A spatial effect on wireless power transfer enables multiple power sources to deliver electric power to multiple receiving devices at a distance in the same vicinity.

In order to efficiently manage and support the wireless power transfer in spatial space, multiple power sources need to communicate and coordinate with each other.

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# WIRELESS POWER TRANSFER – MANAGEMENT –

## Part 3: Multiple source control management

### 1 Scope

This document specifies methods and procedures to form groups for a spatial wireless power-transfer system. The group of spatial wireless power-transfer systems that include multiple power sources provides power transfer to receiving devices based on magnetic resonance technology.

In order to achieve efficient power transfer to multiple receiving devices, this document also specifies methods and procedures to set, share, and control the conditions of power transfer between multiple power sources and receiving devices.

NOTE Expected power-receiving devices are audio, video and multimedia equipment.

### 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.

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