IEC 62827-3

Edition 1.0 2016-12

INTERNATIONAL STANDARD

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

INTERNATIONAL ELECTROTECHNICAL COMMISSION

ICS 43.120

ISBN 978-2-8322-3683-3

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FOREWORD

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International Standard IEC 62827-3 has been prepared by technical area 15: Wireless power transfer, of IEC technical committee 100: Audio, video and multimedia systems and equipment.

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.

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

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

A bilingual version of this publication may be issued at a later date.

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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.

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.

IEC 62827-1, *Wireless power transfer – Management – Part 1: Common components*