



American National Standard for Electromagnetic Noise and Field Strength Instrumentation, 10 Hz to 40 GHz Specifications

C63[®]

Sponsored by the
Accredited Standards Committee C63[®] —Electromagnetic Compatibility

Accredited by the American National Standards Institute

IEEE
3 Park Avenue
New York, NY 10016-5997, USA
14 December 2009

ANSI C63.2-2009
(Revision of
ANSI C63.2-1996)

American National Standard for Electromagnetic Noise and Field Strength Instrumentation, 10 Hz to 40 GHz Specifications

Sponsor

Accredited Standards Committee C63®—Electromagnetic Compatibility

accredited by the

American National Standards Institute

Secretariat

Institute of Electrical and Electronic Engineers, Inc.

Approved 20 October 2009

American National Standards Institute

C63®

Abstract: Electromagnetic compatibility techniques and requirements for instruments measuring quasi-peak, peak, rms, and average values for electrical and electronic equipment for various applications are provided.

Keywords: electromagnetic compatibility, field strength instrumentation

The Institute of Electrical and Electronics Engineers, Inc.
3 Park Avenue, New York, NY 10016-5997, USA

Copyright © 2009 by the Institute of Electrical and Electronics Engineers, Inc.
All rights reserved. Published 14 December 2009. Printed in the United States of America.

C63 is a registered trademark in the U.S. Patent & Trademark Office, owned by the Accredited Standards Committee on Electromagnetic Compatibility.

PDF: ISBN 978-0-7381-6112-9 STD95994
Print: ISBN 978-0-7381-6113-6 STDPD95994

No part of this publication may be reproduced in any form, in an electronic retrieval system or otherwise, without the prior written permission of the publisher.

American National Standard

An American National Standard implies a consensus of those substantially concerned with its scope and provisions. An American National Standard is intended as a guide to aid the manufacturer, the consumer, and the general public. The existence of an American National Standard does not in any respect preclude anyone, whether he has approved the standard or not, from manufacturing, marketing, purchasing, or using products, processes, or procedures not conforming to the standard. American National Standards are subject to periodic review and users are cautioned to obtain the latest editions.

CAUTION NOTICE: This American National Standard may be revised or withdrawn at any time. The procedures of the American National Standards Institute require that action be taken to reaffirm, revise, or withdraw this standard no later than five years from the date of publication. Purchasers of American National Standards may receive current information on all standards by calling or writing the American National Standards Institute.

Authorization to photocopy portions of any individual standard for internal or personal use is granted by the Institute of Electrical and Electronics Engineers, Inc., provided that the appropriate fee is paid to Copyright Clearance Center. To arrange for payment of licensing fee, please contact Copyright Clearance Center, Customer Service, 222 Rosewood Drive, Danvers, MA 01923 USA; (978) 750-8400. Permission to photocopy portions of any individual standard for educational classroom use can also be obtained through the Copyright Clearance Center.

Errata

Users are encouraged to check the IEEE Errata URL (<http://standards.ieee.org/reading/ieee/updates/errata/index.html>), and the one for ASC C63[®] at http://www.c63.org/explanations_interpretations_request.htm, for errata periodically.

Interpretations

Current interpretations can be accessed at the following URLs http://www.c63.org/explanations_interpretations_request.htm.

For more information about the committee that produced and maintains this standard, visit the ANSI Accredited Standards Committee C63[®] web site at <http://www.c63.org>.

Introduction

This introduction is not part of ANSI C63.2-2009, American National Standard for Electromagnetic Noise and Field Strength Instrumentation, 10 Hz to 40 GHz Specifications.

In the process of performing a revision of ANSI C63.2-1996 to include radio noise and field strength characteristics for the 1 GHz to 18 GHz frequency range, the Accredited Standards Committee C63[®]—Electromagnetic Compatibility realized that there was a significant duplication of effort occurring between the international and the national EMC standards committees. For example, the specification ANSI C63.2 mirrored the CISPR 16-1-1:2003 (i.e., originally CISPR 2 and CISPR 3) requirements for the basic field strength instrumentation for the 9 kHz to 1000 MHz frequency range.

Consequently, the C63[®] committee then proposed to adopt CISPR 16, Part 1-1, as the US National Specification for field strength instrumentation but also retaining the unique requirements that are not in CISPR 16-1-1:2003 and are still used by certain domestic organizations.^a These requirements that are not in CISPR 16-1-1 are discussed in Clause 3 of this standard. A comparison between the parameters in these two standards is summarized in Annex A.

Notice to users

Laws and regulations

Users of these documents should consult all applicable laws and regulations. Compliance with the provisions of this standard does not imply compliance to any applicable regulatory requirements. Implementers of the standard are responsible for observing or referring to the applicable regulatory requirements. IEEE does not, by the publication of its standards, intend to urge action that is not in compliance with applicable laws, and these documents may not be construed as doing so.

Copyrights

This document is copyrighted by the IEEE. It is made available for a wide variety of both public and private uses. These include both use, by reference, in laws and regulations, and use in private self-regulation, standardization, and the promotion of engineering practices and methods. By making this document available for use and adoption by public authorities and private users, the IEEE does not waive any rights in copyright to this document.

Updating of IEEE documents

Users of IEEE standards should be aware that these documents may be superseded at any time by the issuance of new editions or may be amended from time to time through the issuance of amendments, corrigenda, or errata. An official IEEE document at any point in time consists of the current edition of the document together with any amendments, corrigenda, or errata then in effect. In order to determine whether a given document is the current edition and whether it has been amended through the issuance of

^a The reason for not accepting CISPR 16-1-1:2003 verbatim is that legacy requirements in the US cross-reference ANSI C63.2 and those legacy requirements are still enforced. For example, the US Department of Defense cross-references ANSI C63.2 in MIL-STD-461F.