AS CISPR 16.1.1:2017 CISPR 16-1-1, Ed 4.0 (2015)



Specification for radio disturbance and immunity measuring apparatus and methods

Part 1.1: Radio disturbance and immunity measuring apparatus— Measuring apparatus



This is a free page sample. Access the full version online.

This Australian Standard® was prepared by Committee TE-003, Electromagnetic Compatibility. It was approved on behalf of the Council of Standards Australia on 6 April 2017.

This Standard was published on 22 May 2017.

The following are represented on Committee TE-003:

- Australian Communications and Media Authority
- Australian Industry Group
- Australian Information Industry Association
- Consumer Electronics Suppliers Association
- Curtin University of Technology
- Department of Defence (Australian Government)
- Electrical Compliance Testing Association
- EMC Society of Australia
- Energy Networks Australia
- Engineers Australia
- Free TV Australia
- Lighting Council Australia
- Wireless Institute Australia

This Standard was issued in draft form for comment as DR AS CISPR 16.1.1:2017.

Standards Australia wishes to acknowledge the participation of the expert individuals that contributed to the development of this Standard through their representation on the Committee and through the public comment period.

Keeping Standards up-to-date

Australian Standards® are living documents that reflect progress in science, technology and systems. To maintain their currency, all Standards are periodically reviewed, and new editions are published. Between editions, amendments may be issued.

Standards may also be withdrawn. It is important that readers assure themselves they are using a current Standard, which should include any amendments that may have been published since the Standard was published.

Detailed information about Australian Standards, drafts, amendments and new projects can be found by visiting **www.standards.org.au**

Standards Australia welcomes suggestions for improvements, and encourages readers to notify us immediately of any apparent inaccuracies or ambiguities. Contact us via email at **mail@standards.org.au**, or write to Standards Australia, GPO Box 476, Sydney, NSW 2001.

Australian Standard®

Specification for radio disturbance and immunity measuring apparatus and methods

Part 1.1: Radio disturbance and immunity measuring apparatus— Measuring apparatus

Originated in Australia as part of AS 1052.1—1976. Previous edition AS/NZS CISPR 16.1.1:2012. Fifth edition revised in Australia and designated AS CISPR 16.1.1:2017.

COPYRIGHT

© Standards Australia Limited

All rights are reserved. No part of this work may be reproduced or copied in any form or by any means, electronic or mechanical, including photocopying, without the written permission of the publisher, unless otherwise permitted under the Copyright Act 1968.

Published by SAI Global Limited under licence from Standards Australia Limited, GPO Box 476, Sydney, NSW 2001, Australia

ISBN 978 1 76035 772 6

2

PREFACE

This Standard was prepared by the Australian members of the Joint Standards Australia/Standards New Zealand Committee TE-003, Electromagnetic Compatibility, to supersede AS/NZS CISPR 16.1.1:2012, *Specification for radio disturbance and immunity measuring apparatus and methods*, Part 1.1: *Radio disturbance and immunity measuring apparatus*.

The objective of this Standard is to specify the characteristics and performance of equipment for the measurement of radio disturbance in the frequency range 9 kHz to 18 GHz. In addition, requirements are provided for specialized equipment for discontinuous disturbance measurements.

This Standard is identical with, and has been reproduced from CISPR 16-1-1, Ed 4.0 (2015), Specification for radio disturbance and immunity measuring apparatus and methods, Part 1.1: Radio disturbance and immunity measuring apparatus—Measuring apparatus

As this Standard is reproduced from an International Standard, the following applies:

(a) In the source text 'this part of CISPR 16' should read 'this Australian Standard'.

(b) A full point substitutes for a comma when referring to a decimal marker.

Australian or Australian/New Zealand Standards that are identical adoptions of international normative references may be used interchangeably. Refer to the online catalogue for information on specific standards.

The terms 'normative' and 'informative' have been used in this Standard to define the application of the annex to which they apply. A 'normative' annex is an integral part of a Standard, whereas an 'informative' annex is only for information and guidance.

3

CONTENTS

1	Scop	e	10
2	Normative references		10
3	Terms and definitions		11
4	Quasi-peak measuring receivers for the frequency range 9 kHz to 1 000 MHz		. 15
•	4.1	General	
	4.2	Input impedance	
	4.3	Sine-wave voltage accuracy	
	4.4	Response to pulses	
	4.4.1	Amplitude relationship (absolute calibration)	
	4.4.2		
	4.5	Selectivity	
	4.5.1	Overall selectivity (passband)	
	4.5.2		
	4.5.3		
	4.5.4		
	4.6	Limitation of intermodulation effects	
	4.7	Limitation of receiver noise and internally generated spurious signals	
	4.7.1		
	4.7.2	Continuous wave	25
	4.8	Screening effectiveness	25
	4.8.1	General	25
	4.8.2	Limitation of radio-frequency emissions from the measuring receiver	25
	4.9	Facilities for connection to a discontinuous disturbance analyzer	26
5	Measuring receivers with peak detector for the frequency range 9 kHz to 18 GHz		26
	5.1	General	26
	5.2	Input impedance	26
	5.3	Fundamental characteristics	26
	5.3.1	Bandwidth	26
	5.3.2	Charge and discharge time constants ratio	27
	5.3.3	Overload factor	27
	5.4	Sine-wave voltage accuracy	27
	5.5	Response to pulses	27
	5.6	Selectivity	28
	5.7	Intermodulation effects, receiver noise, and screening	29
		suring receivers with average detector for the frequency range 9 kHz to	
		Hz	
	6.1	General	
	6.2	Input impedance	
	6.3	Fundamental characteristics	
	6.3.1	Bandwidth	
	6.3.2		
	6.4	Sine-wave voltage accuracy	
	6.5	Response to pulses	
	6.5.1	General	30



This is a free preview. Purchase the entire publication at the link below:

Product Page

S Looking for additional Standards? Visit Intertek Inform Infostore

> Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation