

Australian/New Zealand Standard™

**Specification for radio disturbance and
immunity measuring apparatus and
methods**

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

AS/NZS CISPR 16.1.1:2004

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee TE-003, Electromagnetic Interference. It was approved on behalf of the Council of Standards Australia on 24 March 2004 and on behalf of the Council of Standards New Zealand on 16 April 2004. It was published on 2 June 2004.

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Australian/New Zealand Standard™

Specification for radio disturbance and immunity measuring apparatus and methods

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

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PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee TE-003, Electromagnetic Interference to supersede AS/NZS CISPR 16.1:2002.

This Standard is identical with, and has been reproduced from, CISPR 16-1-1:2003, *Specification for radio disturbance and immunity measuring apparatus Part 1-1: Radio disturbance and immunity measuring apparatus—Measuring apparatus*.

The objective of this Standard is to specify the characteristics and performance of equipment for the measurement of radio disturbance voltages, currents and fields in the frequency range 9 kHz to 18 GHz.

This Standard is Part 1.1 of AS/NZS CISPR 16.1, *Specification for radio disturbance and immunity measuring apparatus and methods*, which consists of the following:

Part 1.1: Radio disturbance and immunity measuring apparatus—Measuring apparatus (this Standard)

Part 1.2: Radio disturbance and immunity measuring apparatus—Conducted disturbances

Part 1.3: Radio disturbance and immunity measuring apparatus—Disturbance power

Part 1.4: Radio disturbance and immunity measuring apparatus—Radiated disturbance

Part 1.5: Radio disturbance and immunity measuring apparatus—Antenna calibration test sites for 30 MHz to 1000 MHz

The terms ‘normative’ and ‘informative’ are used 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.

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<i>Reference to International Standard</i>		<i>Australian/New Zealand Standard</i>	
CISPR		AS/NZS CISPR	
16	Specification for radio disturbance and immunity measuring apparatus and methods	16	Specification for radio disturbance and immunity measuring apparatus and methods
16-1-2	Part 1-2: Radio disturbance and immunity measuring apparatus—Ancillary equipment—Conducted disturbances	16.1.2	Part 1.2: Radio disturbance and immunity measuring apparatus—Ancillary equipment—Conducted disturbances
16-1-3	Part 1-3: Radio disturbance and immunity measuring apparatus—Ancillary equipment—Disturbance power	16.1.3	Part 1.3: Radio disturbance and immunity measuring apparatus—Ancillary equipment—Disturbance power

16-1-4	Part 1-4: Radio disturbance and immunity measuring apparatus—Ancillary equipment—Radiated disturbances	16.1.4	Part 1.4: Radio disturbance and immunity measuring apparatus—Ancillary equipment—Radiated disturbances
16-1-5	Part 1-5: Radio disturbance and immunity measuring apparatus—Antenna calibration test sites for 30 MHz to 1 000 MHz	16.1.5	Part 1.5: Radio disturbance and immunity measuring apparatus—Antenna calibration test sites for 30 MHz to 1 000 MHz
16-2-1	Part 2-1: Methods of measurement of immunity and disturbance—Conducted disturbance measurements	16.2.1	Part 2.1: Methods of measurement of immunity and disturbance—Conducted disturbance measurements
16-2-2	Part 2-2: Methods of measurement of immunity and disturbance—Measurement of disturbance power	16.2.2	Part 2.2: Methods of measurement of immunity and disturbance—Measurement of disturbance power
16-2-3	Part 2-3: Methods of measurement of immunity and disturbance—Radiated disturbance measurements	16.2.3	Part 2.3: Methods of measurement of immunity and disturbance—Radiated disturbance measurements
16-2-4	Part 2-4: Methods of measurement of immunity and disturbance—Immunity measurements	16.2.4	Part 2.4: Methods of measurement of immunity and disturbance—Immunity measurements
16-3	Part 3: CISPR technical reports	16.3	Part 3: CISPR technical reports
16-4-1	Part 4-1: Uncertainties, statistics and limit modelling—Uncertainties in standardized EMC tests	16.4.1	Part 4.1: Uncertainties, statistics and limit modelling—Uncertainties in standardized EMC tests
16-4-2	Part 4-2: Uncertainties, statistics and limit modelling—Measurement instrumentation uncertainty	16.4.2	Part 4.2: Uncertainties, statistics and limit modelling—Measurement instrumentation uncertainty
16-4-3	Part 4-3: Uncertainties, statistics and limit modelling—Statistical considerations in the determination of EMC compliance of mass-produced products	16.4.3	Part 4.3: Uncertainties, statistics and limit modelling—Statistical considerations in the determination of EMC compliance of mass-produced products
16-4-4	Part 4-4: Uncertainties, statistics and limit modelling—Statistics of complaints and a model for the calculation of limits	16.4.4	Part 4.4: Uncertainties, statistics and limit modelling—Statistics of complaints and a model for the calculation of limits

CONTENTS

	<i>Page</i>
1	Scope 1
2	Normative references 1
3	Definitions 3
4	Quasi-peak measuring receivers for the frequency range 9 kHz to 1 000 MHz 5
4.1	Input impedance 5
4.2	Fundamental characteristics 5
4.3	Sine-wave voltage accuracy 5
4.4	Response to pulses 6
4.4.1	Amplitude relationship (absolute calibration) 6
4.4.2	Variation with repetition frequency (relative calibration) 6
4.5	Selectivity 11
4.5.1	Overall selectivity (passband) 11
4.5.2	Intermediate frequency rejection ratio 11
4.5.3	Image frequency rejection ratio 11
4.5.4	Other spurious responses 14
4.6	Limitation of intermodulation effects 14
4.7	Limitation of receiver noise and internally generated spurious signals 15
4.7.1	Random noise 15
4.7.2	Continuous wave 15
4.8	Screening effectiveness 15
4.8.1	Limitation of radio-frequency emissions from the measuring receiver 16
4.9	Facilities for connection to a discontinuous disturbance analyzer 16
5	Peak measuring receivers for the frequency range 9 kHz to 1 000 MHz 16
5.1	Input impedance 17
5.2	Fundamental characteristics 17
5.2.1	Bandwidth 17
5.2.2	Charge and discharge time constants ratio 17
5.2.3	Overload factor 17
5.3	Sine-wave voltage accuracy 18
5.4	Response to pulses 18
5.5	Selectivity 18
5.6	Intermodulation effects, receiver noise, and screening 18
6	Average measuring receivers for the frequency range 9 kHz to 1 000 MHz 18
6.1	Input impedance 19
6.2	Fundamental characteristics 19
6.2.1	Bandwidth 19
6.2.2	Overload factor 19
6.3	Sine-wave voltage accuracy 19
6.4	Response to pulses 19
6.4.1	Amplitude relationship 19
6.4.2	Variation with repetition frequency 20
6.4.3	Response to intermittent, unsteady and drifting narrowband disturbances 20
6.5	Selectivity 21
6.6	Intermodulation effects, receiver noise, and screening 22

7	RMS measuring receivers for the frequency range 9 kHz to 1 000 MHz.....	22
7.1	Input impedance	22
7.2	Fundamental characteristics	22
7.2.1	Bandwidth	22
7.2.2	Overload factor	22
7.3	Sine-wave voltage accuracy.....	22
7.4	Response to pulses	23
7.4.1	Amplitude relationship.....	23
7.4.2	Variation with repetition frequency	23
7.5	Selectivity	24
7.6	Intermodulation effects, receiver noise, and screening.....	24
8	Spectrum analyzers and scanning receivers.....	24
8.1	Spectrum analyzers and scanning receivers for the frequency range 9 kHz to 1 000 MHz	24
8.2	Spectrum analyzers and scanning receivers for the frequency range 1 GHz to 18 GHz	24
9	Audio-frequency voltmeter	26
9.1	Fundamental characteristics	26
9.1.1	Input impedance	26
9.1.2	Sensitivity	27
9.1.3	Frequency response.....	27
9.2	Sine-wave voltage accuracy.....	27
9.3	Screening	27
9.4	Requirements for use as a quasi-peak meter	29
9.4.1	Quasi-peak meter fundamental characteristics	29
9.4.2	Response to pulses.....	29
9.4.3	Variation with repetition frequency	29
9.5	Requirements for use as an r.m.s. meter.....	29
9.5.1	RMS meter fundamental characteristic.....	29
9.5.2	Response to pulses.....	30
9.5.3	Variation with repetition frequency	30
10	Disturbance analyzers.....	30
10.1	Fundamental characteristics	30
10.2	Test method for the validation of the performance check for the click analyzer.....	37
10.2.1	Basic requirements	37
10.2.2	Additional requirements	38
	Annex A (normative) Determination of response to repeated pulses of quasi-peak and r.m.s. measuring receivers.....	39
	Annex B (normative) Determination of pulse generator spectrum.....	44
	Annex C (normative) Accurate measurements of the output of nanosecond pulse generators.....	46
	Annex D (normative) Influence of the quasi-peak measuring receiver characteristics on its pulse response	48
	Annex E (normative) Response of average and peak measuring receivers	49
	Annex F (normative) Performance check of the exceptions from the definitions of a click according to 4.2.3 of CISPR 14-1	53

NOTES

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Australian/New Zealand Standard**Specification for radio disturbance and immunity measuring apparatus
and methods****Part 1.1: Radio disturbance and immunity measuring apparatus—
Measuring apparatus**

1 Scope

This part of CISPR 16 is designated a basic standard, which specifies the characteristics and performance of equipment for the measurement of radio disturbance voltages, currents and fields in the frequency range 9 kHz to 18 GHz. In addition, requirements are specified for specialized equipment for discontinuous disturbance measurements. The requirements include the measurement of broadband and narrowband types of radio disturbance.

The receiver types covered include the following:

- a) the quasi-peak measuring receiver,
- b) the peak measuring receiver,
- c) the average measuring receiver,
- d) the r.m.s. measuring receiver.

In addition there are specifications for spectrum analyzers, scanning receivers and audio-frequency voltmeters.

The requirements of this publication shall be complied with at all frequencies and for all levels of radio disturbance voltages, currents, power or field strengths within the CISPR indicating range of the measuring equipment.

Methods of measurement are covered in Part 2, and further information on radio disturbance is given in Part 3 of CISPR 16. Uncertainties, statistics and limit modelling are covered in Part 4 of CISPR 16.

2 Normative references

The following referenced documents are indispensable for the application 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.

CISPR 11:2003, *Industrial, scientific and medical (ISM) radio-frequency equipment – Electromagnetic disturbance characteristics – Limits and methods of measurement*

CISPR 14-1:2000, *Electromagnetic compatibility – Requirements for household appliances, electric tools and similar apparatus – Part 1: Emission*

CISPR 16-1-2:2003, *Specification for radio disturbance and immunity measuring apparatus and methods – Part 1-2: Radio disturbance and immunity measuring apparatus – Ancillary equipment – Conducted disturbances*

CISPR 16-1-3:2003, *Specification for radio disturbance and immunity measuring apparatus and methods – Part 1-3: Radio disturbance and immunity measuring apparatus – Ancillary equipment – Disturbance power*