AS/NZS 4365:2011

Australian/New Zealand Standard™

Radiocommunications equipment used in the UHF citizen band radio service

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee RC-006, Radiocommunications Equipment—General. It was approved on behalf of the Council of Standards Australia on 16 November 2010 and on behalf of the Council of Standards New Zealand on 23 December 2010.
This Standard was published on 27 January 2011.

The following are represented on Committee RC-006:

AirServices Australia
Australian Communications and Media Authority
Australian Industry Group
Australian Radio Communications Industry Association
Civil Aviation Safety Authority
Department of Defence (Australia)
Electromagnetic Technical Evaluation Committee
Engineers Australia
Free TV Australia
Ministry of Economic Development (New Zealand)
Testing Interests (New Zealand)
Users Interests (Australia)
Wireless Institute Australia

Additional Interests:

Standard Communications
Uniden
Motorola
TMC

Keeping Standards up-to-date

Standards are living documents which 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 Standards may also be withdrawn.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 which may have been published since the Standard was purchased.

Detailed information about joint Australian/New Zealand Standards can be found by visiting the Standards Web Shop at www.saiglobal.com.au or Standards New Zealand web site at www.standards.co.nz and looking up the relevant Standard in the on-line catalogue.

For more frequent listings or notification of revisions, amendments and withdrawals, Standards Australia and Standards New Zealand offer a number of update options. For information about these services, users should contact their respective national Standards organization.

We also welcome suggestions for improvement in our Standards, and especially encourage readers to notify us immediately of any apparent inaccuracies or ambiguities. Please address your comments to the Chief Executive of either Standards Australia or Standards New Zealand at the address shown on the back cover.

This Standard was issued in draft form for comment as DR AS/NZS 4365.

Australian/New Zealand Standard™

Radiocommunications equipment used in the UHF citizen band radio service

Originated as AS/NZS 4365:1996.
Second edition 2002.
Third edition 2011.

Jointly published by SAI Global Limited under licence from Standards Australia Limited, GPO Box 476, Sydney, NSW 2001 and by Standards New Zealand, Private Bag 2439, Wellington 6140

ISBN 978 0 7337 9739 2

PREFACE

This Standard was prepared by the joint Standards Australia/Standards New Zealand Committee RC-006, Radiocommunications Equipment—General, to supersede AS/NZS 4365:2002, *Radiocommunications equipment used in the UHF citizen band radio service*.

The objective of this Standard is to specify minimum essential performance requirements for radiocommunications equipment designed or intended to operate in the citizen band radio service, excluding repeater stations, in Australia and in New Zealand, in the UHF band.

This edition incorporates revisions providing test methods and performance limits to facilitate 12.5 kHz channel operation in alignment with the Australian Communications and Media Authority (ACMA) 400 MHz band restructure and associated changes being made by the Ministry of Economic Development (MED) in New Zealand.

User manual requirements have also been extended to ensure equipment users are advised of possible consequences arising from these changes.

In addition, the specification of test power sources, adjustment mechanisms, time-out timer operation, and receiver conducted spurious radiation limits have all been updated to reflect current technology and practices. The requirements for ‘standard test modulation’ and ‘operational timing requirements’ have both been clarified.

The term ‘normative’ has been used in this Standard to define the application of the appendix to which it applies. A ‘normative’ appendix is an integral part of a Standard.

Statements expressed in mandatory terms in footnotes to tables are deemed to be requirements of this Standard.

CONTENTS

STANDARDS AUSTRALIA/STANDARDS NEW ZEALAND

Australian/New Zealand Standard

Radiocommunications equipment used in the UHF citizen band radio service

1 SCOPE

This Standard specifies the technical performance characteristics, test methods and minimum requirements for radiocommunications transmitters and receivers, required for satisfactory performance in Australia and New Zealand.

The equipment covered by this Standard includes—

(a) citizen band radio service radios operating in the UHF band;

(b) multi-role devices in respect of their operation in the UHF citizen band radio service; and

(c) external power amplifiers designed or intended to be used with a device falling under (a) or (b) above.

This Standard does not apply to—

(i) radiocommunications transmitters or receivers used or intended for use as repeater stations in the citizen band radio service in Australia or New Zealand; and

(ii) multi-role devices in respect of their operation in services other than the UHF citizen band radio service.

2 REFERENCED DOCUMENT

The following document is referred to in this Standard:

ETSI	
EN 300 086-1 V1.4.1 (2010-06) Annex B	Electromagnetic compatibility and Radio spectrum Matters (ERM); Land Mobile Service; Radio equipment with an internal or external RF connector intended primarily for analogue speech; Part 1: Technical characteristics and methods of measurement

3 DEFINITIONS

For the purpose of this Standard the definitions below apply.

3.1 Adjacent channel power (transmitter)

That part of the total power output of a transmitter, under defined conditions of modulation, which falls within a specified passband centred on the nominal frequency of either adjacent channel.

3.2 Artificial load

A non-reactive, non-radiating load whose impedance, as presented to the transmitter output, corresponds to the terminal impedance of the antenna normally connected to the transmitter.

NOTE: This is usually 50 Ω.

3.3 Carrier power (transmitter)

The mean power delivered to the artificial load during a single radiofrequency cycle, in the absence of modulation.