

Australian Standard[®]

Radar speed detection

**Part 1: Functional requirements and
definitions**



This Australian Standard® was prepared by Committee CS-068, Radar Speed Detection. It was approved on behalf of the Council of Standards Australia on 11 July 2003. This Standard was published on 11 August 2003.

The following are represented on Committee CS-068:

- Australian Automobile Association
 - Australian Chamber of Commerce and Industry
 - Institution of Engineers, Australia
 - National Standards Commission
 - New South Wales Police Service
 - Queensland Police Service
 - South Australia Police
 - Tasmania Police
 - Victoria Police
 - Western Australia Police
-

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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 public comment period.

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Part 1: Functional requirements and definitions

Originally issued as AS 2898.1—1986.

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PREFACE

This Standard was prepared by Standards Australia Committee CS-068, Radar Speed Detection, to supersede AS 2898.1—1992. The initial request for preparation of the Standard was submitted by the Australian Automobile Association which wished to see the procedures for using radar speed detection devices formalized in a public document.

This Standard incorporates Amendment No. 1 (September 2006). The changes required by the Amendment are indicated in the text by a marginal bar and amendment number against the clause, note, table, figure or part thereof affected.

In preparing this Standard, cognisance was taken of *Model Performance Specifications for Police Traffic Radar Devices*, published by the US National Highway Traffic Safety Administration.

This Standard specifies basic, functional requirements for radar speed detection devices. It does not purport to be an exhaustive set of requirements for the metrological aspects of speed measurements by means of doppler radar. The establishment of such requirements falls within the area of responsibility of the National Standards Commission (NSC) rather than Standards Australia. The Committee was aware of OIML R91 *Radar equipment for the measurement of the speed of vehicles*, which sets out comprehensive metrological requirements and may be endorsed by the NSC for use in Australia.

This edition of the Standard has been modernized from the 1992 edition to include image capture systems other than photographic systems and to take into account the phasing out of X-band radar devices as forecast in the Foreword to the 1992 edition. Requirements concerning electromagnetic interference have been revised in line with current practice.

This Standard has been prepared to take into account the state of the art of radar speed detection in Australia at the time of publication.

This Standard is not intended to inhibit further advances in radar speed detection technology. The Committee will consider amending the Standard to include suitable requirements for new types of equipment as they become available.

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STANDARDS AUSTRALIA

Australian Standard
Radar speed detection

Part 1: Functional requirements and definitions

SECTION 1 SCOPE AND GENERAL

1.1 SCOPE

This Standard specifies functional requirements for radar devices which are used to measure the speed of targets for law enforcement or for scientific measurement. This Standard applies to both direct doppler radar devices (Types I and II) and slant doppler radar devices (Types III and IV), including devices linked to an image capture system.

1.2 OBJECTIVE

The objective of this Standard is to provide manufacturers and users of radar speed detection devices with a set of minimum requirements for the design and construction of radar speed detection devices used for law enforcement or scientific measurement to ensure adequate device capabilities.

1.3 APPLICATION

This Standard applies to all new equipment supplied after the date of publication of this Standard.

1.4 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

AS/NZS

61000 Electromagnetic compatibility (EMC)

61000.6.1 Part 6.1: General standards—Immunity for residential, commercial and light-industrial environments

AS/NZS CISPR

22 Information technology equipment—Radio disturbance characteristics—Limits and methods of measurement

Commonwealth of Australia

Radio communications Act 1992

5 DEFINITIONS

For the purpose of this Standard the definitions below apply.

1.5.1 Accuracy

The degree to which the radar device measures and displays the correct speed of a target.

1.5.2 Audio doppler

An audible signal from a radar device that is derived from the doppler shift so that the audio tone corresponds to the speed of a target and any ambient signals (including signals from other targets).