



Uninterruptible power systems (UPS) for roadside devices



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 - CIE Australia
 - Department of Planning, Transport and Infrastructure, SA
 - Department of Transport and Main Roads, Qld
 - Hire and Rental Car Industry Association of Australia
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Australian Standard[®]

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PREFACE

This Standard was prepared by the Standards Australia Committee LG-006, Road Traffic Signals. It is one of a number of Standards which set out requirements for the equipment associated with traffic signal installations.

The objective of this Standard is to specify mechanical, electrical, functional and environmental requirements for designers and manufacturers of uninterruptible power systems (UPS) for roadside devices, in order to ensure that such systems operate safely and reliably.

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

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STANDARDS AUSTRALIA

Australian Standard

Uninterruptible power systems (UPS) for roadside devices

SECTION 1 SCOPE AND GENERAL

1.1 SCOPE

This Standard specifies mechanical, electrical, functional and environmental requirements, along with methods of test, for uninterruptible power systems (UPS) for use with road traffic signals or other roadside traffic devices.

The Standard specifies general requirements for the design and construction of UPS to meet the needs of users. The Standard specifies technology that has been proven in the field to provide safe and reliable operation.

The Standard also specifies the minimum documentation required for the safe and correct installation, operation and maintenance of UPS (see Appendix A).

This Standard applies to—

- (a) stand-alone UPS, which are contained within a dedicated housing; and
- (b) integrated UPS, which share a common housing with other equipment.

1.2 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

AS

1275	Metric screw threads for fasteners
1319	Safety signs for the occupational environment
2578	Traffic signal controllers
2700	Colour standards for general purposes
3731	Stationary batteries—Nickel-cadmium
3731.2	Part 2: Valve-regulated type
4086	Secondary batteries for use with stand-alone power systems
4086.2	Part 2: Installation and maintenance
60068	Environmental testing
60068.2.6	Part 2.6: Tests—Test Fc: Vibration (sinusoidal)
60068.2.29	Part 2.29: Tests—Test Eb and guidance: Bump
60529	Degrees of protection provided by enclosures (IP Code)
60947	Low-voltage switchgear and controlgear (series)
60947.7.1	Part 7.1: Ancillary equipment—Terminal blocks for copper conductors
60947.7.2	Part 7.2: Ancillary equipment—Protective conductor terminal blocks for copper conductors
60947.7.3	Part 7.3: Ancillary equipment—Safety requirements for fuse terminal blocks
62040	Uninterruptible power systems (UPS)
62040.1.1	Part 1.1: General and safety requirements for UPS used in operator access areas
62040.2	Part 2: Electromagnetic compatibility (EMC) requirements