



Uninterruptible power systems (UPS) for roadside devices

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Australian Standard[®]

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roadside devices**

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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

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|------------|--|
| 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 |
| 60068.2.29 | 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 |