

Australian/New Zealand Standard™

**Battery charge controllers for
photovoltaic systems — Performance
and functioning**



AS/NZS IEC 62509:2020

This Joint Australian/New Zealand Standard™ was prepared by Joint Technical Committee EL-042, Renewable Energy Power Supply Systems and Equipment. It was approved on behalf of the Council of Standards Australia on 25 March 2020 and by the New Zealand Standards Approval Board on 4 March 2020.

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Preface

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee EL-042, Renewable Energy Power Supply Systems and Equipment.

The objective of this Standard is to establish minimum requirements for the functioning and performance of battery charge controllers (BCC) used with lead acid batteries in terrestrial photovoltaic systems. The main aims are to ensure BCC reliability and to maximize the life of the battery.

This Standard covers the following battery charge control features:

- (a) Photovoltaic generator charging of a battery.
- (b) Load control.
- (c) Protection functions.
- (d) Interface functions.

This Standard defines functional and performance requirements for battery charge controllers and provides tests to determine the functioning and performance characteristics of charge controllers.

This Standard is to be read in conjunction with IEC 62093.

This Standard does not cover MPPT performance, but it is applicable to BCC units that have this feature.

This Standard is identical with, and has been reproduced from, IEC 62509:2010, *Battery charge controllers for photovoltaic systems — Performance and functioning*.

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