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Edition 1.1
Amdt 1

SOUTH AFRICAN NATIONAL STANDARD

Photovoltaic systems for use in individual homes, schools and clinics

Part 2-1: Test procedures for main components — Photovoltaic modules

WARNING

This document references other documents normatively.

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Table of changes

Change No.	Date	Scope
Amdt 1	2017	Amended to change the designation "SANS 959-2-1/NRS 052-2-1" to read "SANS 959-2-1", and to update referenced standards.

Foreword

This South African standard was prepared by National Committee SABS/TC 069, *Power electronics and alternative energy conversion*, in accordance with procedures of the SABS, in compliance with annex 3 of the WTO/TBT agreement.

This document was approved for publication in June 2017.

This document supersedes SANS 959-2-1:2012 (edition 1).

A vertical line in the margin shows where the text has been technically modified by amendment No. 1.

SANS 959 consists of the following parts and sections, under the general title *Photovoltaic systems for use in individual homes, schools and clinics*:

Part 1: Standardized requirements applicable to off-grid individual homes, schools and clinics.

Part 2-1: Test procedures for main components – Photovoltaic modules.

Part 2-2: Test procedures for main components – Batteries.

Part 2-3: Test procedures for main components – Regulators, charge controllers and maximum power point trackers (MPPTs).

Part 2-4: Test procedures for main components – Inverters.

Part 2-5: Test procedures for main components – Luminaires.

Part 3: Standardized requirements applicable to the installation and maintenance of off-grid systems in individual homes, schools and clinics.

Annex A is for information only.

Compliance with this document cannot confer immunity from legal obligations.

Introduction

This section of SANS 959-2 has been developed to standardize the testing of photovoltaic modules as applicable to the solar home systems programme, the schools electrification programme and the clinics electrification programme. The solar home systems programme applies particularly to systems (up to 200 W maximum power) that are envisaged for a national programme to provide solar power supplies to individual homes that would ordinarily be remote from the electricity grid. The schools and clinics programmes apply to systems designed to provide selected functions in schools and clinics and are based on modules of about 900 W maximum power. These schools and clinics would ordinarily be remote from the electricity grid.

Amdt 1

The first edition of this section of SANS 959-2 focussed on the monocrystalline and polycrystalline silicon types of photovoltaic module. This edition includes provision for thin-film solar technologies.

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