

# EG-600-SC

## Single-channel insulation monitor

Standalone earth-fault detection **up to 600 Vdc** for integration with approved third-party controllers, power conversion equipment and battery systems. Onboard audio & visual alarms with a dry-contact relay output.



**600** Vdc  
MAX HV INPUT

**1** channel  
SINGLE CIRCUIT

**30** → 100 kΩ  
TRIP THRESHOLDS

**IP20**  
INDOOR TYPE 1

# Specifications

EG-600-SC · AER12-SC

The EarthGuard EG-600-SC continuously monitors insulation between each pole of the test circuit and reference earth. On fault detection it lights the alarm LED, sounds the buzzer, and engages the indication relay, designed to support compliance with AS/NZS 5033 (PV arrays) and AS/NZS 5139 (battery systems) when installed per the current edition of those standards and other applicable local installation standards.

## ■ GENERAL

WEIGHT

**250 g**

DIMENSIONS (H × W × D)

**155 × 100 × 35 mm**

ENCLOSURE

**Indoor Type 1 / IP20**

OPERATING TEMP.

**-25 to 60 °C**

STORAGE TEMP.

**-25 to 80 °C**

CONNECTION TERMINALS

**Lever push-in · 0.2 – 10 mm<sup>2</sup> (22 – 8 AWG)**

## ■ LOW-VOLTAGE SIDE

INPUT VOLTAGE

**15 – 60 Vdc**

BATT/PSU BYPASS OPTION

**11.5 – 15 Vdc**

MAX POWER CONSUMPTION

**2 W**

ALARM RELAY

**1 × signal · dry contact**

COMMUNICATIONS

**USB-C**

## ■ HIGH-VOLTAGE SIDE

VOLTAGE RANGE

**40 – 600 Vdc**

CHANNELS

**1**

TRIP THRESHOLDS

**30 / 50 / 100 kΩ**

DEFAULT SENSITIVITY

**Low (30 kΩ)**

ISOLATION TO LV

**4 kV transient**

01

### Single-channel simplicity

One monitored circuit, ideal for OEM integration with third-party controllers and PCS.

02

### Field-tunable

Three trip thresholds adjustable over USB-C with AERL Link.

03

### Audio · visual · relay

Onboard buzzer, channel LED, and dry-contact alarm output for external indication.

04

### Standards-aligned

Designed to support AS/NZS 5033 and AS/NZS 5139 detection rules.

MANUFACTURED BY

**Australian Energy Research Laboratories**  
1/75 Bluestone Circuit, Seventeen Mile  
Rocks QLD

CERTIFICATIONS

AS/NZS 3100:2017

AS/NZS 61000.6.3:2012

CONTACT

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