



# EarthGuard Insulation Monitoring

For PV & Battery Storage Systems

The **EarthGuard EG-600** is a standalone device for integration with approved third-party controllers, power conversion equipment and battery systems.

Utilizing proprietary detection techniques, the AERL EarthGuard Insulation Monitoring Device simultaneously monitors up to two circuits (20 – 600Vdc) for conductor insulation degradation.

The EarthGuard EG-600 monitoring device satisfies the earth fault detection requirements of both AS/NZS 5033:2014 & AS/NZS 5139:2019 with onboard audio/visual alarms, and alarm relay outputs for external fault indication.

## Product Highlights



20 – 600V  
Monitoring Range



Dual Channel  
Monitoring



High Accuracy  
Detection



Audio & Visual  
Alarms



Signal Indication  
Relays



## Australian Energy Research Laboratories

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| General Specifications |                                                                  |
|------------------------|------------------------------------------------------------------|
| Parameter              | Typical                                                          |
| Weight                 | 0.3 kg                                                           |
| Dimensions (H x W x D) | 170 x 90 x 35 mm                                                 |
| Enclosure Type         | Indoor Type 1 / IP20                                             |
| Operating Temperature  | -25 to 60°C                                                      |
| Storage Temperature    | -25 to 80°C                                                      |
| Connection Terminals   | Screwless Terminals (0.25 mm <sup>2</sup> -> 7 mm <sup>2</sup> ) |

| Low Voltage Side            | EG-600               |
|-----------------------------|----------------------|
| Input Voltage Range         | 15 – 60 Vdc          |
| Max Power Consumption       | 2W                   |
| Alarm Indication Relays (2) | Signal (Dry Contact) |
| Communications              | USB                  |

| High Voltage Side             | EG-600          |
|-------------------------------|-----------------|
| Voltage Range                 | 20 – 600 Vdc    |
| Channels                      | 2               |
| Trip Threshold                | 30kΩ            |
| Isolation to Low Voltage Side | 4kV (Transient) |

| Standards         | EG-600                |
|-------------------|-----------------------|
| Electrical Safety | AS/NZS 3100:2017      |
| EMC (Domestic)    | AS/NZS 61000.6.3:2012 |

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