Field calibrator for the Biral ALS-2 Ambient Light Sensor

... in situ calibration without the need to disconnect or send commands via the software interface

The ALS-2 Ambient Light Sensor Calibrator provides a quick and simple method of verifying the ALS-2 performance in the field.

The requirement to regularly check the performance of ambient light sensors (also referred to as background luminance meters) used in aviation systems can be costly and time consuming if the sensor must be removed and sent away for testing. The often used alternative of observing a change in output when the window is blocked cannot be considered to provide a reliable indication of performance in an aviation system.

The ALS-2 calibrator has been designed to reduce operational downtime to the absolute minimum whilst ensuring that the ALS-2 under test is both operational and correctly calibrated.

The battery powered calibrator slips over the hood of the ALS-2 and is securely held in place with locking ring. The calibrator then communicates with the ALS-2 using an IR optical link removing the need to disconnect cables or send commands via the system software. The calibration of the ALS-2 zero point and gain is checked against a known light level and automatically adjusted as necessary. The operator is kept informed of progress through two status indicators on the calibrator body. A typical test and calibration sequence is completed in less than 5 minutes.

KEY FEATURES & BENEFITS

- No need to disconnect or remove ALS-2
- 5 minutes typical calibration time
- Simple to use by non-specialist staff
- Battery powered for ease of use
- Rugged carry case with accessories
- 2 Years Warranty
# ALS-2 CAL
Ambient Light Sensor Calibrator
Specifications

## Calibrator Capabilities

<table>
<thead>
<tr>
<th>Function</th>
<th>Zero point and gain check/calibration of ALS-2 Ambient Light Sensor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calibration accuracy</td>
<td>≤ 5% of applied value</td>
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<tr>
<td>Calibration time</td>
<td>Typically 3 minutes, Maximum 8 minutes</td>
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<tr>
<td>Spectral excitation</td>
<td>Wavelength range 420-675 nm, peak 565 nm Analogous to CIE luminous spectral efficiency</td>
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</tbody>
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## Environmental

| Operating temperature     | -40°C to +70°C                                                        |
| Operating humidity        | 0 – 100% Non-condensing                                              |
| Protection rating         | IP54                                                                |

## Certification & Compliance

- CE certified
- RoHS and WEEE compliant

## Outputs

<table>
<thead>
<tr>
<th>To ALS-2</th>
<th>IR optical communication</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operator</td>
<td>Two status indicators</td>
</tr>
</tbody>
</table>

## Power Requirements

| Calibrator                | Internal rechargeable NiCad battery Usually 30 calibrations per charge |
| Battery Charger           | Universal input mains charger supplied with a range of common socket adaptors |

## Additional Features

| Carry Case                | Supplied in a rugged plastic carry case with battery charger and manual |

## Specifications

### Dimensions in mm

![Dimensions Diagram](image)

- Dimensions in mm:
  - Width: 229 mm
  - Height: 128 mm
  - Depth: 166 mm

### Power Requirements

- **Lifetime**: >10 Years
- **Calibrator**: Internal rechargeable NiCad battery
  - Typically 30 calibrations per charge
- **Battery Charger**: Universal input mains charger supplied with a range of common socket adaptors

### Included with Calibrator

- The ALS-2 Calibrator is supplied in a rugged plastic carry case along with:
  - Universal mains battery charger
  - User manual and calibration certificates

### Accessories – Optional

- **ALSCAL.WTY**: 1 Year Extended Warranty

*Specifications subject to review and change without notice. E&OE.*