

Ambient Light Sensor Calibrator

ALS-2 CAL

INTRODUCTION

The ALS-2 CAL is a field calibrator for the Senseca ALS-2 Ambient Light Sensor, providing a quick and simple method of verifying ALS-2 performance directly in situ. It eliminates the need to remove the sensor or send commands via the system software, greatly reducing operational downtime.

Regular checking of ambient light sensors used in aviation systems is essential but can be costly and time-consuming if the sensor has to be removed and returned for testing. Simple checks such as blocking the sensor window do not provide a reliable indication of performance. The ALS-2 CAL has been developed to provide a controlled, repeatable calibration while keeping the ALS-2 in service.

The battery-powered calibrator fits over the ALS-2 hood and is secured with a locking ring. Communication with the ALS-2 is via an IR optical link, so there is no need to disconnect cables. The zero point and gain of the ALS-2 are checked against a known light level and automatically adjusted as required. Two status indicators on the calibrator body keep the operator informed throughout the test, and a complete verification and calibration sequence typically takes less than five minutes.



*ALS-2 Calibrator connected to the
ALS-2 for in situ calibration*



- **NO NEED TO DISCONNECT OR REMOVE THE ALS-2**
- **TYPICAL CALIBRATION TIME LESS THAN 5 MINUTES**
- **SIMPLE OPERATION SUITABLE FOR NON-SPECIALIST STAFF**
- **BATTERY POWERED FOR CONVENIENT FIELD USE**
- **RUGGED CARRY CASE SUPPLIED WITH ACCESSORIES**
- **2-YEAR WARRANTY**

General specifications

OUTPUTS

To ALS-2 IR optical communication

Operator Two status indicators

POWER REQUIREMENTS

Calibrator Internal rechargeable NiCad battery
Typically 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

ENVIRONMENTAL

Operating temperature -40 °C to +70 °C

Operating humidity 0 – 100% RH non-condensing

Protection degree IP 54

PHYSICAL

Material Powder coated aluminium

Weight 1.4 kg calibrator only

Lifetime >10 years

CERTIFICATION & COMPLIANCE

- CE Certified
- EMC compliance with EN61326-1997, 1998, 2001
- RoHS and WEEE compliant

Calibration capabilities

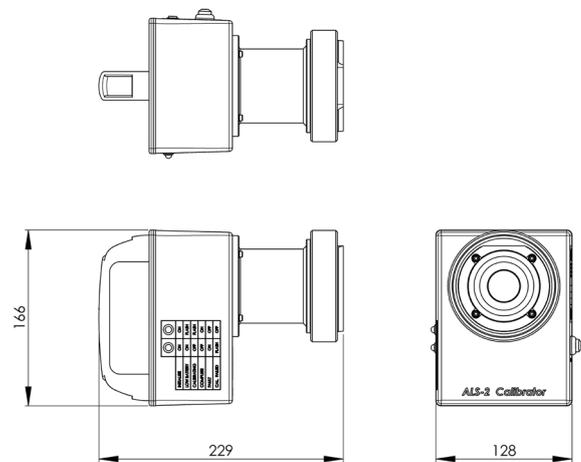
Function Zero point and gain check/calibration of ALS-2 Ambient Light Sensor

Calibration accuracy $\leq 5\%$ of applied value

Calibration time Typically 3 minutes
Maximum 8 minutes

Spectral excitation Wavelength range 420–675 nm, peak 565 nm
Analogous to CIE luminous spectral efficiency

Dimensions



Optional heated hood prevents snow accumulating around the optical window.

Ordering codes

ALS-2CAL	Ambient Light Sensor Calibrator
ALSCAL.WTY	1 year extended warranty

The calibrator is delivered in a rugged plastic carry case along with universal mains battery charger, user manual and calibration certificates.