AeroX Light Data Sheet



1. Introduction

The AeroX Light is a runway light intensity monitor (RLIM) designed specifically for Campbell Scientific automated weather observing systems (AWOS). The AeroX Light can monitor up to four runways that have two lighting loops per runway. Airports with more runways require additional AeroX Lights.

The AeroX Light determines runway light intensity by measuring the current in the lighting loop using clamp-on current transducers. Each current transducer outputs from 4 to 20 mA of current proportional to the amount of current in the lighting loop. Typically, edge and center lighting loops are on each airport runway. The lights can be LED or incandescent. The AeroX Light monitors the current and sends the calibrated current data to the Campbell Aero server for interpretation. The Aero server polls the AeroX Light when the data is required.

The AeroX Light consists of an enclosure that houses a CR1000X data logger, AC power protection devices, and a power supply. Campbell Scientific offers power options to handle voltages up to 260 VAC and provide battery backup.

2. Features

- Capable of monitoring four runways edge and center lighting loops for a total of eight lighting loops
- Reports battery voltage and errors such AC power failure, protection circuit fault, low battery
- Controlled by clamp-on, current calibration software
- TCP/IP communications with Campbell Aero server
- Lockable poly-fiber enclosure

3. Specifications

Number of lighting 4 runways edge and center lighting loops monitored:

loops for a total of 8 lighting loops

Type of lights

LED (up to 6.6 A), incandescent (up to

monitored: 20 A)

AC input range: 85 to 264 VAC Short-term input

voltage: 300 VAC

Maximum AC input

current: 2 A

AC frequency range: 45 to 65 Hz

Inrush surge current: < 15 A (typical)

Backup battery: Maintains power to AeroX Light for a

minimum of 4 hours

Operating

temperature: -40 to 85 °C

Clamp on current

transducer

calibration: Software controlled

Communications: TCP/IP communications with

Campbell Aero

MTBF: > 500 000 h in accordance with IEC

61709 (SN 29500)

Transient protection: Pluggable, no-fuse, fail-safe surge

suppression device

Terminals: Spring clamp terminal connections

Enclosure: Lockable poly-fiber

Enclosure

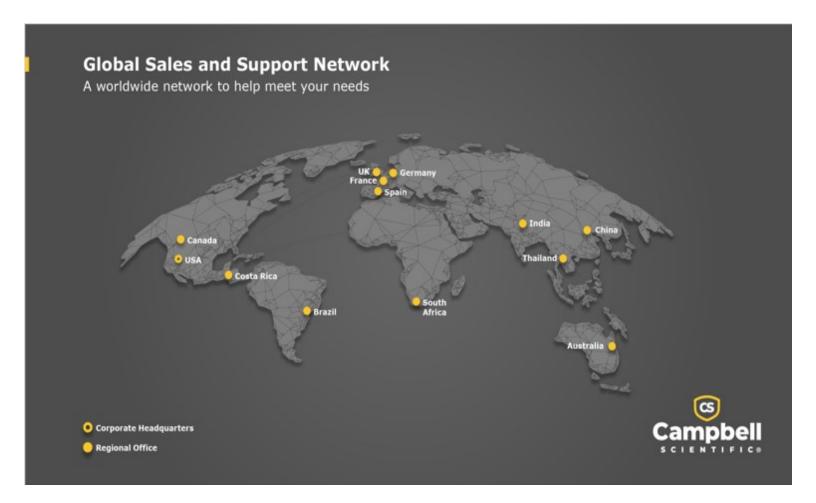
dimensions: 46 x 51 x 30 cm (18 x 20 x 12 in)

Weight: 14 kg (30 lb)

Compliance: All components meet UL, CE, and CSA

power safety requirements





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