

# AeroX Light Data Sheet



System

## 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

<b>Number of lighting loops monitored:</b>	4 runways edge and center lighting loops for a total of 8 lighting loops
<b>Type of lights monitored:</b>	LED (up to 6.6 A), incandescent (up to 20 A)
<b>AC input range:</b>	85 to 264 VAC

<b>Short-term input voltage:</b>	300 VAC
<b>Maximum AC input current:</b>	2 A
<b>AC frequency range:</b>	45 to 65 Hz
<b>Inrush surge current:</b>	< 15 A (typical)
<b>Backup battery:</b>	Maintains power to AeroX Light for a minimum of 4 hours
<b>Operating temperature:</b>	-40 to 85 °C
<b>Clamp on current transducer calibration:</b>	Software controlled
<b>Communications:</b>	TCP/IP communications with Campbell Aero
<b>MTBF:</b>	> 500 000 h in accordance with IEC 61709 (SN 29500)
<b>Transient protection:</b>	Pluggable, no-fuse, fail-safe surge suppression device
<b>Terminals:</b>	Spring clamp terminal connections
<b>Enclosure:</b>	Lockable poly-fiber
<b>Enclosure dimensions:</b>	46 x 51 x 30 cm (18 x 20 x 12 in)
<b>Weight:</b>	14 kg (30 lb)
<b>Compliance:</b>	All components meet UL, CE, and CSA power safety requirements



# Global Sales and Support Network

A worldwide network to help meet your needs



## Campbell Scientific Regional Offices

### Australia

**Location:** Garbutt, QLD Australia  
**Phone:** 61.7.4401.7700  
**Email:** [info@campbellsci.com.au](mailto:info@campbellsci.com.au)  
**Website:** [www.campbellsci.com.au](http://www.campbellsci.com.au)

### Brazil

**Location:** São Paulo, SP Brazil  
**Phone:** 11.3732.3399  
**Email:** [vendas@campbellsci.com.br](mailto:vendas@campbellsci.com.br)  
**Website:** [www.campbellsci.com.br](http://www.campbellsci.com.br)

### Canada

**Location:** Edmonton, AB Canada  
**Phone:** 780.454.2505  
**Email:** [dataloggers@campbellsci.ca](mailto:dataloggers@campbellsci.ca)  
**Website:** [www.campbellsci.ca](http://www.campbellsci.ca)

### China

**Location:** Beijing, P. R. China  
**Phone:** 86.10.6561.0080  
**Email:** [info@campbellsci.com.cn](mailto:info@campbellsci.com.cn)  
**Website:** [www.campbellsci.com.cn](http://www.campbellsci.com.cn)

### Costa Rica

**Location:** San Pedro, Costa Rica  
**Phone:** 506.2280.1564  
**Email:** [info@campbellsci.cc](mailto:info@campbellsci.cc)  
**Website:** [www.campbellsci.cc](http://www.campbellsci.cc)

### France

**Location:** Montrouge, France  
**Phone:** 0033.0.1.56.45.15.20  
**Email:** [info@campbellsci.fr](mailto:info@campbellsci.fr)  
**Website:** [www.campbellsci.fr](http://www.campbellsci.fr)

### Germany

**Location:** Bremen, Germany  
**Phone:** 49.0.421.460974.0  
**Email:** [info@campbellsci.de](mailto:info@campbellsci.de)  
**Website:** [www.campbellsci.de](http://www.campbellsci.de)

### India

**Location:** New Delhi, DL India  
**Phone:** 91.11.46500481.482  
**Email:** [info@campbellsci.in](mailto:info@campbellsci.in)  
**Website:** [www.campbellsci.in](http://www.campbellsci.in)

### South Africa

**Location:** Stellenbosch, South Africa  
**Phone:** 27.21.8809960  
**Email:** [sales@campbellsci.co.za](mailto:sales@campbellsci.co.za)  
**Website:** [www.campbellsci.co.za](http://www.campbellsci.co.za)

### Spain

**Location:** Barcelona, Spain  
**Phone:** 34.93.2323938  
**Email:** [info@campbellsci.es](mailto:info@campbellsci.es)  
**Website:** [www.campbellsci.es](http://www.campbellsci.es)

### Thailand

**Location:** Bangkok, Thailand  
**Phone:** 66.2.719.3399  
**Email:** [info@campbellsci.asia](mailto:info@campbellsci.asia)  
**Website:** [www.campbellsci.asia](http://www.campbellsci.asia)

### UK

**Location:** Shephed, Loughborough, UK  
**Phone:** 44.0.1509.601141  
**Email:** [sales@campbellsci.co.uk](mailto:sales@campbellsci.co.uk)  
**Website:** [www.campbellsci.co.uk](http://www.campbellsci.co.uk)

### USA

**Location:** Logan, UT USA  
**Phone:** 435.227.9120  
**Email:** [info@campbellsci.com](mailto:info@campbellsci.com)  
**Website:** [www.campbellsci.com](http://www.campbellsci.com)