CAMPBELL SCIENTIFIC®
WHEN MEASUREMENTS MATTER

LW110

Lightning Warning System

Know When It's Safe

Measurements

- *Electric field*
- *Lightning strikes**
- *Temperature & relative humidity**
- *Wind speed & direction**
- *Solar radiation**
- *GPS time sync**
- *Barometric pressure**
- *Precipitation**

**optional*

Overview

The LW110 provides continuous monitoring of local electric field and triggers warnings when there is potential for lightning. Because warnings are based on measurements of electric field, instead of prior strikes, the system can detect lightning danger, even when no other strikes have occurred.

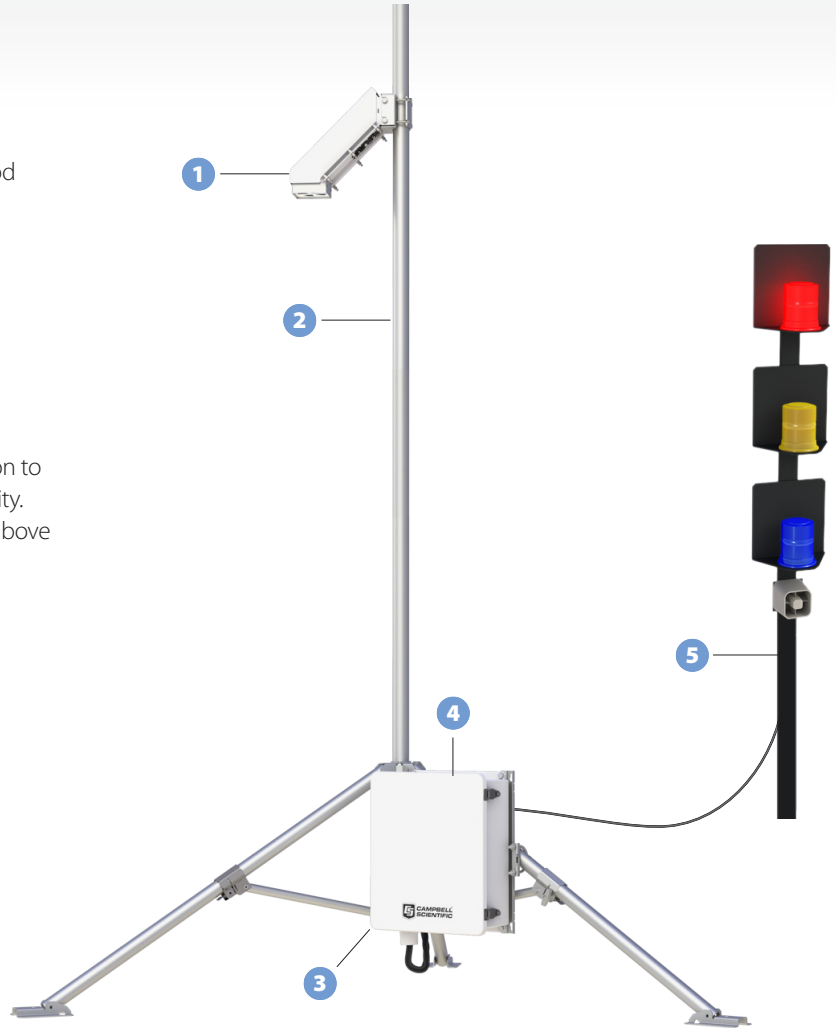
By measuring the electric field at your location, the LW110 can be relied upon to remove the guesswork from critical decisions: 1) when to seek shelter as a storm approaches and 2) when it's safe to resume activities as a storm passes.

Benefits and Features

- First strike warning—senses potential for lightning
- "All clear" notices when lightning threat has passed
- Up to 7 mile detection radius
- Visual and audible alarms
- PC, web, and email alarms when communication is added
- Optional SG000 detects strikes up to 20 mile radius and can be added to create a complete lightning-threat measurement and analysis system
- Optional meteorological sensors for expanded weather monitoring and logging
- Rugged construction
- Low power consumption
- Low maintenance—extensive diagnostics lets you know when maintenance is needed

Example Configuration

1. CS110 Electric Field Meter
2. CM106 10-foot Galvanized-Steel-Tubing Instrument Tripod
3. ENC14/16 Enclosure
4. 12 Ahr Battery with AC Power
5. RA100 Strobe & Siren Alarm



Customizations

The LW110 is customizable, allowing you to configure the station to your project's specifications, while retaining turn-key functionality. The following components are alternatives or additions to the above configuration:

Lightning Detector

- SG000 Strike Guard Lightning Sensor

Meteorological Sensors

Temperature & Relative Humidity

- HMP60 Temperature and Relative Humidity Probe
- HC2S3 Temperature and Relative Humidity Probe

Wind Speed & Direction

- 05103 Wind Monitor

Solar Radiation / Barometric Pressure / GPS

- CS300 Pyranometer
- CS100 Barometric Pressure Sensor
- GPS16X-HVS GPS Receiver

Precipitation

- TE525WS Rain Gage
- TB4 Rain Gage

Communication

Ethernet

- NL200 Network Link Interface

Fiber

- FC100 Fiber Optic Converter

Radio

- RF401 Spread Spectrum Radio
- RF450 900-MHz, 1-W Spread-Spectrum Radio

Alarms

- RA100 Strobe & Siren Alarm, (<200 ft away)
- RA110 Remote Strobe & Siren Alarm (>200 ft away)
- Computer- or web-based alarms
- Email
- Text (SMS)

Power Supply

- 24 Ah battery with 20 W Solar Panel
- 84 Ah battery with 50 W Solar Panel
- 12 Ah battery with AC Power
- 12 Ah battery with AC power and UL certification

Software

- LOGGERNET Datalogger Support Software
- LOGGERNETADM Datalogger Software for Large Networks
- RTMCPRO Real-Time Monitoring and Control Software

Mounting

Tripod

- CM106 7-to-10 ft Galvanized-Steel-Tubing Tripod
- CM110 10-foot Stainless-Steel Instrument Tripod

Pole

- CM500 10-ft Galvanized Pole (2.4 in. OD) w/o j-bolt mount
- CM505 8-ft Galvanized Pole (2.4 in. OD) w/ j-bolt mount
- CM510 8-ft 304 Stainless Steel Pole (2.4 in. OD) w/ j-bolt mount
- CM515 8-ft 316L Stainless Steel Pole (2.4 in. OD) w/ j-bolt mount

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