The Monitor Sensors Lightning Strike Station detects and gives immediate warning of lightning strikes within a defined area. The Lightning Strike sensor counts lightning strikes by detecting electrical fields with signal strength greater than the factory set threshold voltage of the sensor.

Detection sensitivity varies with:

- the severity of the lightning strike, (the peak current of which may vary from a few thousand amperes up to several hundred thousand amperes);
- the sensor threshold voltage which will be set between 0.1 volt and 1 volt depending on the version selected;
- The general topography of the surrounding district;
- The height and installation of the station;
- The ground conductivity; and,
- The proximity of buildings or trees.

As a general guide, typical coverage is an area within a 5-kilometre radius of the sensor for the LS1. When equipped with Monitor Sensors LS3 high sensitivity sensor (0.1 volt/metre), the detection range will extend to beyond 50 km.

False alarms are a problem in any early warning system and several options are available to screen unwanted noise, the cause of these alarms. There are also options to provide various levels of alarm as storms approach.

The Lightning Strike Station can operate as a stand-alone sensing device or be incorporated into any of the Monitor Sensors range of automatic weather or water quality stations. The basic station is fitted with alarm light, siren and timer devices for automatic cut-off of alarms.

**Features**

- Robust Design
- Corrosion Resistant Finish
- Low Power Consumption
- Low Maintenance
- Interchangeable sensors (LS1, LS2 & LS3)
- Mounting Options Available
- Remote site power options.

**Applications**

- Meteorological
- Auto start up of UPS prior to power failure
- Automatic Weather Stations
- Forestry - Fire
- Emergency Services
- Educational
- Golf and sports clubs
- Sensitive construction sites
- Ordnance manufacturing/dumps

**Quality Assurance**

Monitor Sensors products are manufactured under a third party accredited System ISO9002.

**Specifications**
Measurement Units: Electrical field with signal strength
>1.0 volt/metre
>0.3 volts/metre
>0.1 volt/metre

Sensitivity:
LS1  1.0 v/m
LS2  0.3 v/m
LS3  0.1 v/m

Maximum Count Rate: 5 strikes per second

Alarm:
Audible Alarm - Siren - 98 dba
Visual Alarm - Xenon Beacon
Flash rate 1/sec
Note: Cancel button with remote option available.

Timer:
Visual Alarm on adjustable flashing -2 sec
Audible 2 sec - 2 min
Beacon 2 sec - 30 mins
Cancel button

Temperature Range: -10°C to +50°C

Humidity Range: 0-100%

Sensor Output: +5 volt pulse,

Station Output: parallel control outputs, 100 millisecond duration for remote operations of Alarms.

Power Supply: 12 v @ 400 ma

Current Drain: 0.1 ma - 400 ma in Alarm condition.

Sensor Weight: (unpacked): 250 grams

Station Weight: Depending on configuration (call factory for details)

Dimensions: Overall height including sensors 2 metres

Related Products:
AWS1  Automatic Weather Station
LP1  Lightning Protection Kit
BP1  Barometric Pressure Sensor
RG(X)  Tipping Bucket Rain gauge
M10  Standard Cross Arm Mount
MMI-0406  Free Standing Base Assembly