



## Lightning Detection S7822

- Bearing/directional capability •
- Single-point omni-directional system •
- 30 nautical mile detection radius •

This stand-alone lightning detection sensor reports lightning and thunderstorm occurrences. This model is certified by the Government for use within NWS ASOS, and adds a bearing/directional capability. This sensor is a single-point, omni-directional system that detects optical, electrical, and magnetic pulses to determine the occurrence of cloud-to-cloud and cloud-to-ground lightning strikes.

Once an occurrence is triggered, the sensor then determines the distance of the cloud-to-ground strikes from the sensor (into three range bins).

Cloud-to-cloud occurrences are grouped and displayed into a single range bin. This data is then processed through the sensor reporting algorithm to meet given reporting requirements.

Testing by the NWS has indicated that the Global Atmospheric Lightning and Thunderstorm sensor has an extremely low false alarm rate, and frequently can





## Technical Specifications

**S7822**

Detection Range:	30 nautical mile radius
Thunderstorm Detection Efficiency:	100% within 10 miles, with 3 discharges
Range Resolution:	0 - 5 miles, 5 - 10 miles, 10 - 30 miles
Bearing Resolution:	0° to 360°, being reported in an octant
Power:	90 - 120 VAC, 100 W maximum
Output:	RS-232C, RS-422, or fiber optic
Output Data:	One minute present weather messages, Simultaneous broadcast of event as data occurs, Or sensor can be polled by user
Environmental:	-50°C to +55°C, with heater

### PHYSICAL

#### Dimensions

Without Mast:	651 mm x 279 mm x 203 mm
With Mast:	1550 mm x 279 mm x 279 mm

#### Weight

Without Mast:	9.9 kg
With Mast:	15.9 kg