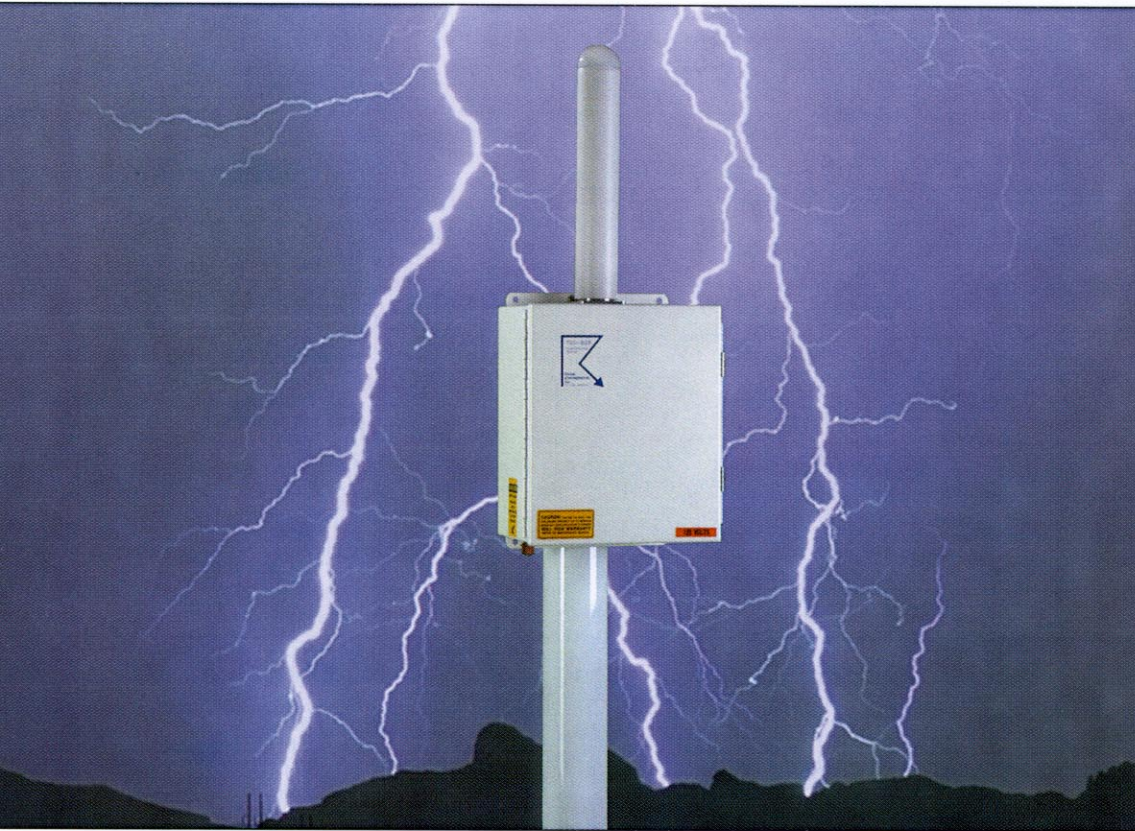


TSS 928

Thunderstorm Sensor, Model 928



The TSS 928 is designed to meet the demanding and critical requirements related to integrated thunderstorm detection reports within automated surface weather observation platforms that support METAR observations and similar data requirements.

Why Choose the TSS 928?

- Successor to the TSS 924 Thunderstorm Sensor, which is fully certified by the U.S. National Weather Service for use on ASOS platforms configured for reporting thunderstorms
- State-of-the-art lightning detector that applies three major components of a lightning event — optical, magnetic and electrostatic pulses — to effectively detect and accurately locate lightning events in a real-time environment
- Provides a complete and accurate omnidirectional profile of lightning activity by discriminating between cloud and cloud-to-ground lightning events, as well as reporting the range and bearing to individual events
- Data output format supports direct interface with most common communication systems, thus eliminating the potential for costly custom engineering efforts
- Automatic internal antenna-to-output self-diagnostics features provide an ongoing status of sensor functionality
- Sustained performance in extreme weather conditions, verified through independent testing
- Modular design allows for system check, fault isolation, and on-site repair maintenance in the field through use of field-replaceable modules
- Design provides for unprecedented reliability and zero false alarms; end-users can initiate advance preparation and avoidance procedures in full confidence

What Can the TSS 928 Do?

The TSS 928's patented technology provides information that can be used to:

- Integrate lightning reports within automated weather observation programs
- Provide critical and reliable information when performing local lightning threat analysis
- Assist users in determining when they should isolate sensitive equipment, such as security and communications systems, from sources of lightning-induced power surges
- Facilitate customer initiation of backup procedures for automated data processing systems, such as computers, monitors and data loggers
- Support user activation of remote visual and audible warning devices

The Specifics

Detection Range

30 nautical mile radius from installation location

Thunderstorm Detection Efficiency

100% within 10 miles with three discharges

Range Resolution

0–5 miles, 5–10 miles and 10–30 miles
(user can set range in nautical miles or kilometers)

Bearing Resolution

1° increments, 0° to 360°, being reported by octant



Global Atmospheric, Inc.

Technical Specifications

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Electrical

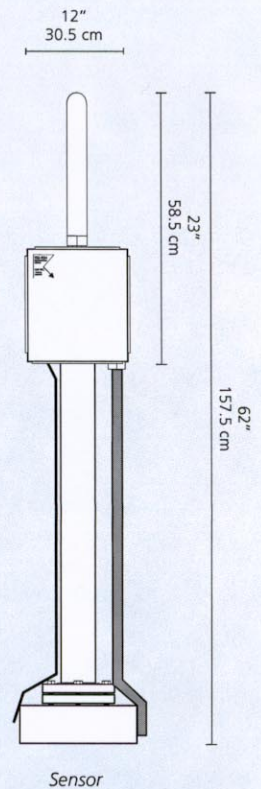
AC Power	90–120 VAC (option 180–240 VAC)
Power Consumption	100 watts maximum
Communications	<ul style="list-style-type: none">• Metallic or fiber optic links• Serial ASCII format• RS 232 and RS 422 serial at 9600 bps• Output via automatic one-minute present weather messages, simultaneous broadcast of data as event occurs, or sensor may be polled by user
Standards/Approvals	UL, CSA, CE and MILSTD 45208

Mounting Configuration

Ground	Standard stanchion (available from Global Atmospheric, Inc.)
Mast	Mast mount brackets, outside diameter 3.5 inches
Height	3.0 meter maximum height recommended

Environmental Conditions

Operating/Storage Temp. Range	-50°C to +50°C with heater
Maximum Wind Load	0–120 knots, 222 km/h
Humidity Tolerance	0% to 100%
Siting Requirements	Flexible installation profile. Questions should be referred to your distributor or Global Atmospheric, Inc. sales representative.



For more information, please contact:
Global Atmospheric, Inc.
2705 East Medina Road
Tucson, AZ USA 85706-7155
Phone: (800) 283-4557 in the U.S.
(520) 806-7300
Fax: (520) 741-2848
sales@glatmos.com
www.glatmos.com