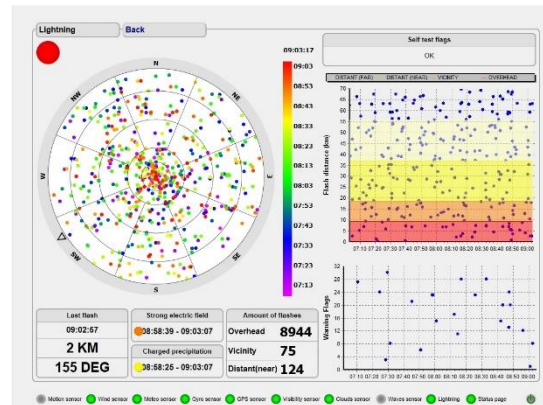
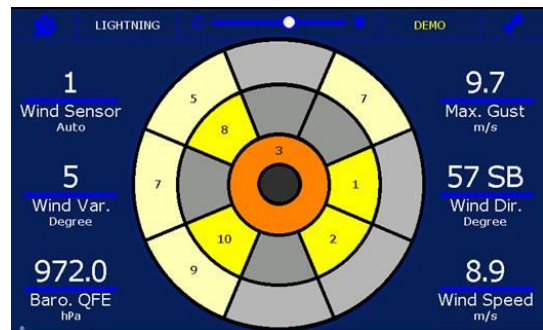




BTD-300



Software OMC-DOL-BTD with BTD-300



OMC-140 Multifunctional TFT Display with BTD-300

Datasheet

BTD-300 Thunderstorm (Lightning) Detector

The BTD-300 Thunderstorm Detector is a standalone sensor that reliably detects the presence of all forms of lightning to a range of 83 km.

The unique quasi electrostatic operating principle gives the detector a very low false alarm rate and the ability to warn of the risk of overhead lightning.

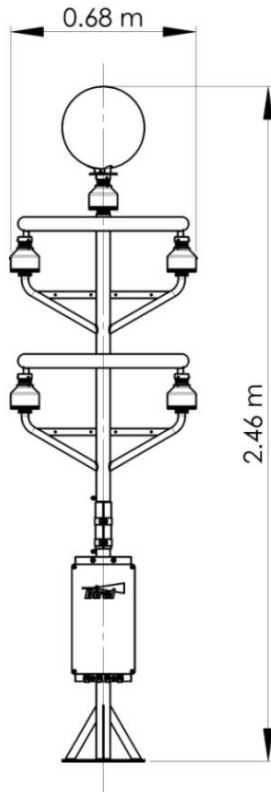
The ability to reliably detect and range cloud-to-cloud lightning, which is typically much more common than cloud-to-ground strikes, makes the BTD-300 much more sensitive to the presence of storms compared to devices that rely on radio detection.

Features

- Detects cloud-to-cloud and cloud-to-ground lightning
- 83 km detection range
- Warns of overhead lightning risk
- Meets Federal Aviation Administration (FAA) performance requirements for aerodrome use
- Including direction finder
- Optional software OMC-DOL-BTD
- Optional display OMC-140
- Highly immune to radio interference
- Very low maintenance requirements

General

The electrostatic operating principle allows the sensor to warn of the risk of overhead lightning before the first discharge occurs. Virtually maintenance free in operation, the BTD-300 can either interface directly to an integrated system or be operated using the supplied PC compatible display and logging software. The optional warning relay module allows the sensor to automatically sound alarms whenever a storm approaches.



Data Summary

- **Detects** Cloud-to-cloud, cloud-to-ground and intra-cloud lightning discharges
- **Output** Ethernet or Serial data (RS422)
- **Range** 83 km (51 statute miles)
- **Detection efficiency** 95% for single lightning flash (any type)
 - 99% for storm with 2 flashes
 - 99.9% for storm with 3 flashes
 - For flashes within 56 km
- **False alarm rate** <2%
- **Range Measurement** 0-83 km
- **Error** 0-20 km \pm 5 km, 20 to 83km \pm 10 km
- **Maximum flash rate** 120 per minute
- **Time of flash** Nearest 10ms (internal clock)
- **Measurement principle** Passive, quasi-electrostatic. No moving parts
- **Direction** Reported to nearest degree
- **Sensor Power** 110 to 240 VAC 50-60Hz Universal
- **Operating Temperature** -40°C to 60°C
- **Operating Humidity** 5% – 100% RH
- **Protection rating** IP66
- **Weight (Sensor Head)** 25kg



Welcome to the world of Observator

Solutions beyond expectations. That's what sets Observator apart. We believe in taking the extra step. Retaining our competitive edge, through innovation and uncompromised support, are key to success. As an ISO 9001:2015 certified company, we apply the highest quality standards to our products and systems.

Since 1924 Observator has evolved to be a trend-setting developer and supplier in a wide variety of industries. From instruments for meteorological and hydrological solutions, air and climate technology, to high precision mechanical production, window wipers and sunscreens for shipping and inland applications.

Solutions beyond expectations

Originating from the Netherlands, Observator has grown into an internationally oriented company with a worldwide distribution network and offices in Australia, Germany, the Netherlands, Singapore and the United Kingdom.

www.observator.com