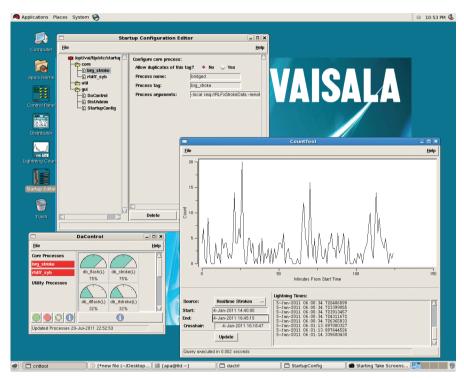
# VAISALA

# Vaisala Thunderstorm Total Lightning Database TLD100 and TLD200



Total Lightning Database TLD100 and TLD200 is a processing module in the Vaisala Thunderstorm Information System that specializes in archiving cloud and cloud-toground lightning data for forensic applications.

# Easy, Secured Access to Real-time and Archived Lightning Information

Total Lightning Database TLD100 and TLD200 is the lightning data management processor module that receives and stores real-time lightning data from the Vaisala Thunderstorm central processor. Vaisala Thunderstorm Information System operators use the TLD100 and TLD200 to archive their lightning data into a relational database. Users have easy and secured access to the archived data for use in their lightning display software and lightning analysis software. The TLD100 and TLD200 also provides secured access to real-time lightning data.

### Features/Benefits

- Provides long-term storage of stroke and flash data in a relational database for poststorm and multi-year statistical analyses
- Distributes archived data to Vaisala FALLS<sup>®</sup> Fault Analysis and Lightning Location System
- Supports multiple workstations and simultaneous queries
- Manages multiple user connections

# **Flexibility for Users**

Multiple users can simultaneously access lightning information for use in their Vaisala FALLS<sup>®</sup> Fault Analysis and Lightning Location System, or custom lightning application software.

Vaisala TLD100 and TLD200 allows flexible and efficient manipulation of lightning data through a published set of industry standard Structured Query Language (SQL).

# **Technical Data**

#### Summary

The TLD100 and TLD200 resides on a single or multiprocessor server. It includes the Vaisala lightning database software license. The TLD100 and TLD200 utilizes a powerful, open source, objectrelational database system by PostgreSQL. PostgreSQL has proven architecture that has earned a strong reputation for reliability, data integrity and correctness.

#### **Hardware Minimum Specifications**

TLD100 and TLD200 module includes a reliable server with the following minimum specifications\*: One or more x86 64 compatible CPU's, 2 GHz or faster 4 internal hard drives, each 500GB or larger. Server should accept more than 4 HD's for future growth 16GB RAM (TLD100) or 32GB RAM (TLD200). Server should support future RAM growth to 96GB. Hardware RAID controller that supports RAID 5 USB ports 2 NIC Ethernet ports (100/1000Mbps) DVD+RW burner VGA Monitor supporting 1280x1024 resolution Red Hat Enterprise Linux (RHEL) version 5 Server Software license (64 bit ed.) RHEL5\*\* compatible modem \* Please note: Computer hardware is subject to change. In case of evolution of an item, an equivalent or better item will be provided. \*\*RHEL5 release at 5.5 or greater

#### Data Access/Output

Scalable number of simultaneous users Supports simultaneous real-time and archived data access Access to archived data based on date/time, latitude/longitude, and range/azimuth queries Base configuration supports on-line storage for one billion strokes or flashes Simultaneous flash or total lightning and stroke data access support

### System Compatibility

Communication Interfaces Asynchronous RS-232 TCP/IP (recommended) TLD100 and TLD200 supports: Archive lightning location data to Vaisala FALLS (TLD200 only) ODBC-compliant applications and other Vaisala FALLS® server software (may require additional hardware)

#### **Environmental Specifications\*\*\***

\*\*\* The environmental specifications are equal to the HW specifications by default. The following specifications are subject to change without notice based on hardware availability.

Operating temperature	+10 °C to +35 °C (50 °F to 95 °F)
Storage temperature	-40 °C to +65 °C (-40 °F to 149 °F)
Operating relative humidity	20 % to 80 % non-condensing
	(non-condensing twmax = $+29 \text{ °C}$ )
Storage relative humidity	5 % to 95 % non-condensing
	(twmax = +38 °C)
Operating altitude	-16 to 3,048 m (-50 ft to 10,000 ft)
Storage altitude	-16 m to 10,600 m (-50 ft to 35,000 ft)

## **Power Requirements**

100 to 240 VAC; 47 to 63 Hz; 0.4 kVA

#### **Support Services**

Training and after-sales support services are available for maintaining optimal network and processor performance. Contact your Vaisala Sales Representative for service agreement information.



For more information, visit

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