

# Vaisala Thunderstorm Archive Processor AP5000



*Archive Processor AP5000 is a processing module in the Vaisala Thunderstorm Information System that specializes in archiving cloud and cloud-to-ground lightning data for forensic applications.*

## EASY, SECURED ACCESS TO REAL-TIME AND ARCHIVED LIGHTNING INFORMATION

Archive Processor AP5000 is the lightning data management processor module that receives and stores real-time lightning data from the Vaisala Thunderstorm Central Processor CP8000 or CP7000.

Vaisala Thunderstorm Information System operators use the AP5000 to archive their lightning data into Sybase®, a relational database manager. Users have easy and secured access to the archived data for use in their lightning display software and lightning analysis software. The AP5000 also provides secured access to real-time lightning data.

## FLEXIBILITY FOR USERS

Multiple users can simultaneously access lightning information for use in their Vaisala FALLS® Fault Analysis and Lightning Location System and Vaisala Data Analysis Module DAM, or custom lightning application software. The standard data format allows users to import lightning data into their weather display software that is configured to accept external data.

## AP5000 FEATURES AND BENEFITS

- Stores real-time lightning data from the Central Processor CP
- Provides long-term storage of stroke and flash data in a relational database, Sybase®, for post-storm and multi-year statistical analyses
- Distributes archived data to Vaisala FALLS® Fault Analysis and Lightning Location System and Vaisala Data Analysis Module DAM application software
- Supports multiple workstations and simultaneous queries
- Manages multiple user connections, including accounting and security control functions with the capability to add users
- Allows flexible and efficient manipulation of lightning data through a published set of industry standard Structured Query Language (SQL) function calls and procedures
- Provides standard and customized lightning data format outputs that can be integrated with weather display software configured to ingest external data

# Technical data

## Summary

The AP5000 resides on a single or multiprocessor Sun® server. A resident Sybase® relational database is provided with this module. All databases in the Sybase relational database management system, including lightning databases, are mirrored for increased reliability.

## Base System

AP5000 module includes a Sun® server with the following:
256 MB RAM (minimum)
18 GB storage (minimum)
CD-ROM, floppy drive
21" 24-bit color monitor
18 GB mirrored storage (minimum)
8-port serial adapter (minimum)
Base Sybase® with 8 seat license
AP5000 software
User's Guide

It supports eight simultaneous dial-up users over serial lines. A maximum of 24 simultaneous users can be supported by adding an optional 16-port serial adapter.

## 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
AP5000 supports:	Archive lightning location data to Vaisala FALLS® and Vaisala DAM analysis software
	Real-time data to Vaisala PDM, Vaisala LTraX® and other third-party software
	ASCII-based, user-defined formats
	Stored procedures and triggers
	ODBC-compliant applications and other Sybase® supported products
	Vaisala FALLS® server software (may require additional hardware)
	Custom interfaces for ORACLE™, INFORMIX™ and DB2™ available at additional cost

## Environmental Specifications

Operating temperature	0°C to 40°C
Non-operating temperature	-40°C to 70°C
Relative humidity	5% to 95%, non-condensing

## Power Requirements

100 to 240 VAC; 47 to 63 Hz; 0.4 kVA
Backup or secondary storage 8 mm tape

## 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.



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