Vaisala ALARM Automated Lightning Alert and Risk Management System

Manage Lightning Risk With Lightning Threat Display and Automated Warnings
- Cloud-to-ground lightning activity shown in three ranges and in directional octants when used with a Vaisala local lightning sensor
- Cloud lightning counts when used with a Vaisala local lightning sensor
- Electric field intensity measurements when used with up to seven Vaisala sensors
- Displays data within a 30-nautical mile (56-km) radius around the location
- Map overlays

Custom Alarm Settings
- Set alarms for specific lightning activity levels in each range and directional octant and for cloud lightning
- Set alarms for unsafe electric field levels
- Choice of automatic audible, visual and e-mail message alarms
- Send alarm messages to any e-mail-enabled cell phone or pager
- Logically combine cloud-to-ground, cloud and electric field intensity alarms for complete customization for unique local environments

Optional Automatic Relays
- Trigger sirens or beacons
- Switch generators on and off
- Switch off vulnerable equipment
- Up to eight relays available

Features/Benefits
- Provides lightning early warning that can save lives
- Automates actions, such as alarms, notifications, and switches
- Objective decision making tool, with no interpretation necessary
- Data archiving for replay option
Technical Data

Summary
Vaisala ALARM displays electric field measurements from up to seven Vaisala electric field mills and real-time lightning flash data from one Vaisala local lightning Thunderstorm Sensor. Vaisala ALARM system includes a personal computer, network card, software, color monitor and power strip with surge protection.

Hardware Requirements

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Processor</td>
<td>Pentium® III 750 MHz (minimum 500 MHz)</td>
</tr>
<tr>
<td>RAM</td>
<td>256 MB</td>
</tr>
<tr>
<td>Hard Drive Space</td>
<td>20 GB</td>
</tr>
<tr>
<td>Ports</td>
<td>2 serial</td>
</tr>
<tr>
<td>Monitor</td>
<td>17” (choose from standard and flat screen options)</td>
</tr>
<tr>
<td>Resolution</td>
<td>1024 x 768 pixels (or higher)</td>
</tr>
<tr>
<td>Color Depth</td>
<td>24 bit</td>
</tr>
<tr>
<td>Peripherals</td>
<td>CD-ROM drive, floppy drive, surge suppressing power strip</td>
</tr>
</tbody>
</table>

Operating System
Microsoft Windows XP (SP 3.0), Windows 7 (SP 1.0)

Communications
The standard data link between the Vaisala ALARM system and Vaisala electric field mills and Vaisala local lightning is by direct serial connection via two RS-232 ports.

Communications Options

- Communications card (32-bit PCI, 8 serial ports)
- For connecting to sensors within 10,000 feet of the system, communications hardware is a RS-232 cable, a RS-232/RS-422 interface, and a RS-422 cable.
- Other configurations are available for distances exceeding 10,000 feet.

Additional Options
- Relay card 32-bit PCI, eight outputs; termination card and connecting cable
- UPS APC 1000 VA, 120V or 240V
- Battery pack for UPS extended backup

Support Services
Vaisala ALARM system training can be tailored to your specific needs. Technical support is available online and via telephone, e-mail and fax. Contact your sales representative for details.

Vaisala local lightning status window shows whether sensor passed self test and shows current flash counts in each octant and ring. “Commands” feature allows user to communicate with the sensor.

System status window shows the status of all sensors and the status of all alarms.

Two windows show Vaisala electric field mills information: view current measurements numerically and graphically.

For more information, visit www.vaisala.com or contact us at sales@vaisala.com

Ref. B210321EN-G ©Vaisala 2011
This material is subject to copyright protection, with all copyrights retained by Vaisala and its individual partners. All rights reserved. Any logos and/or product names are trademarks of Vaisala or its individual partners. The reproduction, transfer, distribution or storage of information contained in this brochure in any form without the prior written consent of Vaisala is strictly prohibited. All specifications — technical included — are subject to change without notice.