VAISALA

Vaisala Thunderstorm Electric Field Mill EFM550



Vaisala Thunderstorm Electric Field Mill EFM550 integrates with Vaisala localarea, real-time lightning systems to monitor the development and dissipation of overhead lightning threats by measuring the local atmospheric electric field.

Features and Benefits

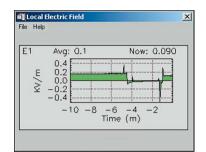
- Advance warning of overhead lightning threat
- High-resolution lightning threat data
- Exceptional reliability and low maintenance
- Minimizes false alarms
- No preventative maintenance required during the first two years of operation
- Flexible siting and easy installation

Advance Warning of Overhead Lightning Threat

The EFM550 integrates with these local-area, real-time lightning information systems:

- Vaisala Thunderstorm Lightning Warning System TWX300
- Vaisala Thunderstorm Sensor TSS928™ with Vaisala ALARM Automated Lightning Alert Risk Management software

The EFM550 provides for flexible and convenient operation. Digital output supports on-site system and function tests. The EFM550 allows for correction adjustment of electricfield enhancement. Hardware for roof mount is included.



EFM II Status	×
File Help	
Local Field Mill #1 Status: Up	
+0.100	
+0.100	
+0.100	
+0.102	
+0.100	
+0.095	
+0.098	
+0.088	
+0.088	
+0.100	-

EFM550 data can be displayed using optional Vaisala ALARM Automated Lightning Alert Risk Management Software to show current electric field measurements numerically and graphically

Adding EFM550 to these systems provides advance warning of overhead lightning threats and then identifies when the threat has passed to operations especially vulnerable to lightning, such as:

- Aircraft refueling and ramp safety
- Aerospace operations
- Munitions and blasting operations
- Ordnance facilities
- Explosives handling and storage
- Hazardous material handling
- Oil storage and refineries
- Chemical processing

Technical Data

Accuracy	+/- 5 % of readin	
	offset +/- 50	v/m
Response Time		l Sec
Signal Interface	RS-232 (8 bit binary, 1200 b	aud)
Sampling	Fixed 2/sec message	rate
Range	+/- 10 kV/m,	max
Environmental Cor		
Operating/Storage Temp	Ũ	
	(-23 °C to +5	0 °C)
Humidity	0% to	100%
Mechanical		
Motor	Brushless; 25,000 hours M	
Cable	4-twisted pair, 24 AWG	min
Electrical		
Voltage	100-240 VAC, 50-60 Hz; or 20-30	VDC
Power Protection	Multi-stage transient prote	ction
Power Consumption	2.3 v	vatts
Mounting		
Hardware included for	convenient mounting to a vertical	pipe
	or flat mounting sur	

Minimum 6.0 in.(15.2 cm) clearance from bottom of junction box to mounting surface. Maintain a minimum of 18.0 in.(45.7 cm) area clear between

mill head and mounting surface.

Support Services AND Standard Warranty

Training, technical support, spare parts and service agreements are available for maintaining optimal sensor performance. Vaisala warrants all products manufactured by Vaisala to be free from defects in workmanship or material for one year from the date of delivery. Contact your Vaisala Sales Representative for specific support services and product warranty details.





For more information, visit

Ref. B210372EN-H ©Vaisala 2012 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.