Product Data Sheet

3M[™] EM Aware TNG ESD Event Monitor

The EM Aware TNG Event Monitor is designed to:

- Provide a real time detection of most ESD events, change of static voltage and verification of critical environment ionizers (< + 5V offset)
- Continuously monitor the environment for ESD
- Provide a comprehensive diagnostic tool

The EM Aware TNG ESD Event Monitor measures parameters through a single remote antenna, rejects most non-ESD events, and provides output of data.



Selection Guide

Model	ESD Events	Event Magnitude	Event Counter	Change on Static Voltage	lonizer Verification*
3M034-031-TNG	\checkmark		\checkmark		
3M034-030-TNG	\checkmark	\checkmark	\checkmark	\checkmark	

*Only for ionizers having less than \pm 5V offset

Properties	Typical Value		
ESD Event Monitor			
Measurement	Magnitude of HF Electromagnetic Field by ESD Event		
ESD Event Threshold Range	$60 - 140 \text{ dB}\mu\text{V}$ typical (default setting: $80\text{dB}\mu\text{V}$)		
Raw Input Signal	60 dBµV - 134 dBµV typical		
Filtering Function	ESD		
Static Voltage Monitor			
Measurement	Change of static voltage		
Static Voltage Setting Range (+/-)	12.5V, 100V, 250V, 500V, 1000V		
Analog Output	Vout = 1 V (4 mA for 250Ω) typical for high negative static voltage value range Vout = 5 V (20 mA for 250Ω) typical for high positive static voltage value range		
Verification of Ionizer*	(Model 3M034-031-TNG only)		
Compatible Ionizer Monitoring Balance Range	Steady State DC Blower Ionizer ± 5V* *typical		
Connectivity			
Input	SMA Connector for Remote antenna		
Outputs	RJ45 connector, 4-20mA analog output or RS485 as digital output		
General			
Alarm	Buzzer		
Display	LCD		
Power	Universal 100 - 240VAC 0.5A, ~ 50 - 60Hz Output: 12VDC 1.5A		
Dimension (approx.)	3.17" W x 2.23" H x 1.50" D (antenna not included) (81 mm W x 57 mm H x 38 mm D)		
Weight (approx.)	146g		

*Only for ionizers having less than + 5V offset

*** The readings of ionization voltage and decay under identical conditions may not always be correlated with CPM. 3MTM EM Aware TNG ESD Event Monitor is not a replacement for regular test of ionizer by CPM.



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