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	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$
3M034-030-TNG	$\sqrt{}$	\checkmark	\checkmark	$\sqrt{}$	

^{*}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 dBμV typical (default setting: 80dBμV)			
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 250 Ω) typical for high negative static voltage value range Vout = 5 V (20 mA for 250 Ω) 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 ignizers having less than ± 5V offset				

^{*}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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SCS:

<u>3M3A1-C-TNG</u> <u>3M2A3-C-TNG</u> <u>3M2AM3-C-TNG</u> <u>3M034-031-TNG</u> <u>3M034-030-TNG</u> <u>3M3A3-C-TNG</u> <u>3M1A4-C-TNG</u> 3M2AM2-C-TNG 3M2A2-C-TNG 3M2A4-C-TNG 3M2A6-C-TNG 3M2A1-C-TNG 3M3A5-C-TNG 3M3A4-C-TNG