



PRODUCT BROCHURE

E2-EM DUST MONITOR / SPM Analyzer

(Triboelectric Technology)
For Continuous Emission Monitoring System-CEMS



Introduction

The measurement of **E2-EM** dust monitors is based on particles interacting with an isolated probe mounted into a duct or stack. When moving particles pass nearby or hit the probe, a signal is induced. This signal is then processed through a series of advanced algorithms to filter out the noise and provides the most accurate dust measurement. Classic **triboelectric technology** is based on the DC signal, which is caused by particles making contact with the sensor to transfer charges

Features

1. On-line Continuous monitoring of SPM for various emission sources
2. Combined techniques ,adaptive stabilization, dynamic adaptive phase-lock amplification
3. Easy start-up and commissioning
4. Rugged design for harsh industrial conditions
5. E2E based design and development of cloud server connectivity modem.



Industries Served

Chemical

Energy

Metal

Cement

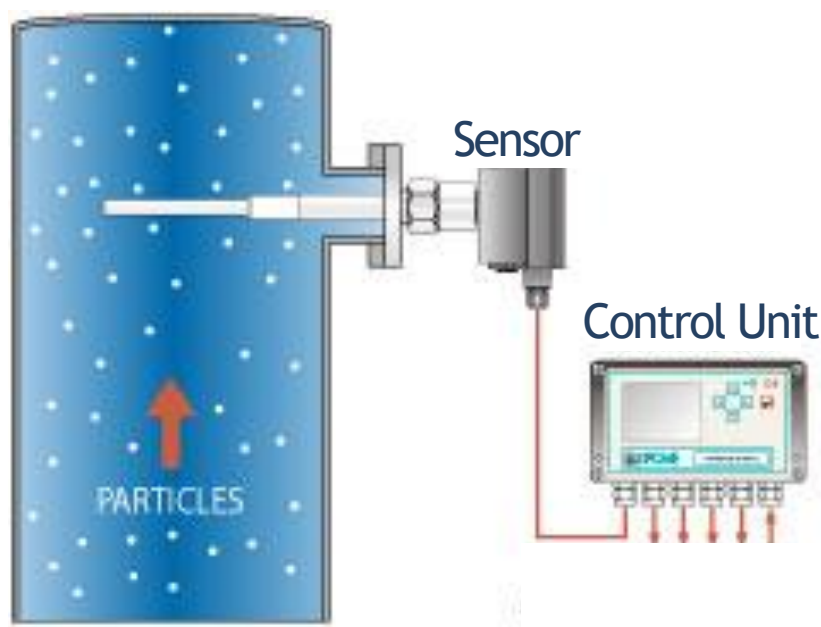
Pharma

Mining

Food

Paper

Technical Specification



Product Name		E2-EM	
Measured objects		Suspended Particulate Matter (SPM)	
Measurement principle		Triboelectric technology	
Measurement range		0 to 1000 mg/nm³	
Power supply requirements		24 V DC ±10% 1 00 ... 240 V AC ±10%, 50 / 60 Hz	
Power consumption		Up to 10 W DC / AC	
Output signals		4 -20 mA output	
Communication interface		Communication RS-485	
Communication protocol		Modbus RTU (with RS-485)	
Physical characteristics			
Enclosure		Abs	
Wetted parts		<ul style="list-style-type: none">Probe: Stainless steel	
Weight		1.5kg (3.3lb)	
Ambient conditions			
Temperature		-40 ... 60 °C (−40 ... 140°F)	
Humidity		Max. 95 %relative humidity (non-condensing)	
Process conditions			
Temperature		<ul style="list-style-type: none">Max. 300 °C (572 °F) optionally up to 700 °C (1292 °F)	
Pressure		<ul style="list-style-type: none">Max. 600 kPa (87.02 psi) in temperatures up to 300 °C (572 °F)Max. 300 kPa (43.51 psi) in temperatures from 300 °C (572 °F) to 700 °C (1292 °F) when high-temperature process connection is used	