

## Guide to Application Parameters for Technologies

Measurement Technology	Technology	Stack Diameter (m)	Concentration (mg/m <sup>3</sup> )		Filter Type	Certification		Dry	Humid	Wet	ATEX IECEx Hazardous Zone		Type of Dust		Velocity Dependant	
			Min	Max		EU	USA				Gas	Dust	Same	Changing		
Probe Electrification	Charge Induction (AC)	PCME ElectroDynamic™	0.2 - 4	0.05	1000	Bag, Cyclone, Drier, Scrubber (5) None (6)	OAL1 TUV MCERTS (7)	MACT, PM detector	✓	✓	x	✓ (7)	✓	✓	x	No (8)
	Contact Charge Transfer (DC)	DC Triboelectric	0.2 - 2	1	1000	Bag, Cyclone	x	MACT	✓	x	x	?	✓	✓	x	Yes
	Combination AC & DC	Combination AC & DC/Tribo	0.2 - 2	1	1000	Bag, Cyclone	TUV	MACT	✓	x	x	✓	✓	✓	x	Yes
Transmissometry	Ratiometric Opacity	PCME DynamicOpacity™	1 - 8 (PCME VIEW 580 /480) 1 - 15 (PCME STACK 602)	10 (3)	1000	Bag (1), Cyclone, EP, None	TUV	PM detector	✓	x	x	x	x	✓	x	No
		Dynamic Detection Principle	0.5 - 12	20	1000	Bag (1), Cyclone, EP, None	x	x	✓	x	x	x	x	✓	x	No
	Opacity	PCME Opacity	2 - 10 (1)	30 (4)	1000	EP, None	TUV	PS-1	✓	x	x	✓	✓	✓	x	No
		Other Transmittance	0.5 - 12	30	10000	EP, None	TUV	PS-1	✓	x	x	✓	✓	✓	x	No
Scattered Light	Scattered Light (Forward)	PCME ProScatter™	1 - 4 (2)	0.02	300 (10)	Bag, Cyclone, EP, none	OAL1 TUV MCERTS	PS-11, PM detector	✓	x	✓ (9)	POA (7)	POA (7)	✓	x	No
		Other Forward Scatter	1 - 3 (2)	0.1	200 (10)	Bag, Cyclone, EP, none	OAL1 TUV MCERTS	PM detector	✓	x	✓ (9)	✓	✓	✓	x	No
	Scattered Light (Back/Side)	Back/Side Scatter	1 - 4 (1) (2)	25	500 (10)	Bag (1), Cyclone, EP, none	TUV	PM detector	✓	x	x	?	?	✓	x	No
		PCME ProScatter™ /Backscatter	2 - 10	10	500	Bag (1), Cyclone, EP, none	x	PM detector	✓	x	x	x	x	✓	x	No

**Notes:**

(1) Concentration dependant	(5) No water droplets	(9) Using Wet Stack monitor
(2) Repeatable Flow dependant	(6) No filter - not advised	(10) Must have constant clean air purge supply 24/7
(3) Application specific	(7) Model specific	
(4) Stack diameter dependant	(8) Velocity range 8-20m/sec	

The above statements are for guidance only and fulfill the majority of application parameters, however, the actual stack conditions will dictate suitability, therefore, a Site Survey Form should always be undertaken to confirm suitability. If in doubt ask PCME Ltd for advice.

**PCME Ltd**  
Clearview Building  
60 Edison Road  
St Ives Cambs UK  
PE27 3GH

Tel: +44 (0)1480 468200  
Fax: +44 (0)1480 463400  
E-mail: [contact@pcme.com](mailto:contact@pcme.com)  
[www.pcme.com](http://www.pcme.com)