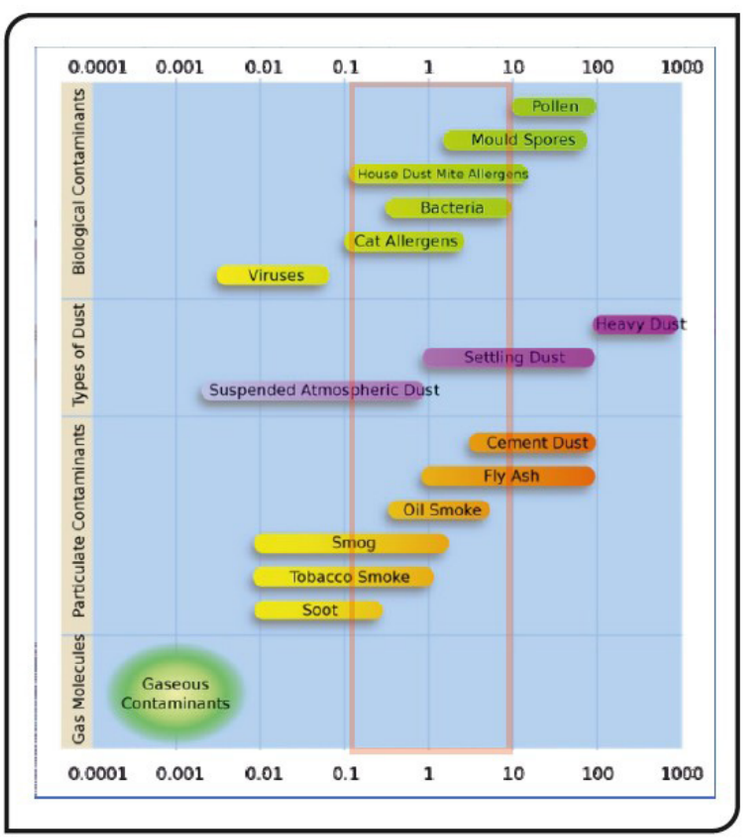
AFSS

FULL-SCOPE CBRN DETECTION, MEASUREMENT, ANALYSIS AND PREVENTION SYSTEM SOLUTIONS

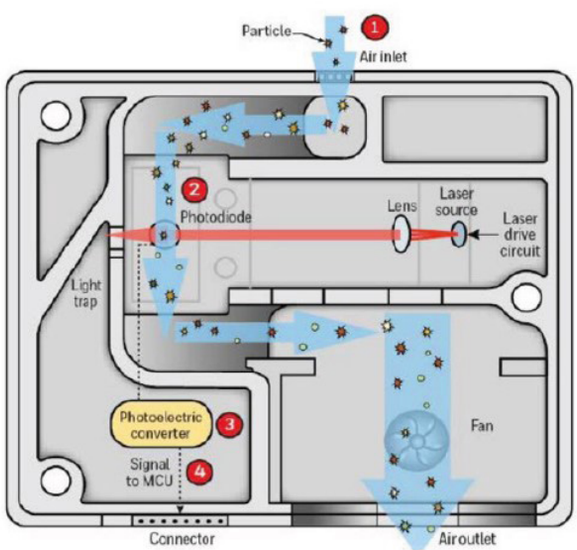
• Detection at High Precision	• Capability to Detect Different Biological, Chemical Agents
• Automatic – Semi-Automatic Operation System	• LCD Display Support

AIR MEASURING DEVICE

AFSS Biological Detection System measures particles with a diameter between 0,3 and 10 m by using laser-based particle sensor. An LCD display, ensures settled visualization of PM1, PM2.5, PM4 and PM10 values. Detailed analysis of PM readings enables real-time particle size visualization. It measures the light radiated by separate particles carried within a sample air-flow by a laser beam. These measurements are used to determine particle size and concentration of the number of particles. Particle mass loads PM1 PM2.5 PM4 or PM10, are calculated from particle size spectrums and concentration data by assuming a particle concentration and refraction index (RI).



This diagram shows types of atmospheric particulate matter and size distribution in micrometer (SNAIL FAN µm).



Sensor

Snail Fan

SPECIFICATIONS	CONDITION	VALUE	UNIT
Mass Concentration Range	-	0 - 1000	µg/m3
Mass Concentration Size Range	PM1.0	0.3 - 10	µm
	PM.2.5	0.3 - 2.5	µm
	PM4	0.3 - 4	µm
	PM10	0.3 - 10	µm
Mass Concentration Sensitivity PM1 and PM2.5	0 - 100 µg/m3	±10	µg/m3
	100 - 1000 µg/m3	±10	%
Mass Concentration Sensitivity PM4 and PM10	0 - 100 µg/m3	±25	µg/m3
	0 - 1000	µg/m3 ±25	%
Annual Sensitivity Loss	0 - 100 µg/m3	±1,25	µg/m3 / year
	100 - 1000 µg/m3	±1,25	% / year
Sampling Duration	-	1±0.04	second
Operating Voltage		24	VDC
Current Value Max.		2	A
Operating Temperature		-32, +49	°C
Operating Humidity Range		0-96 %RH	%RH
Dimensions	widthxlengthxheight	212x235x264	mm
Weight		5	kg