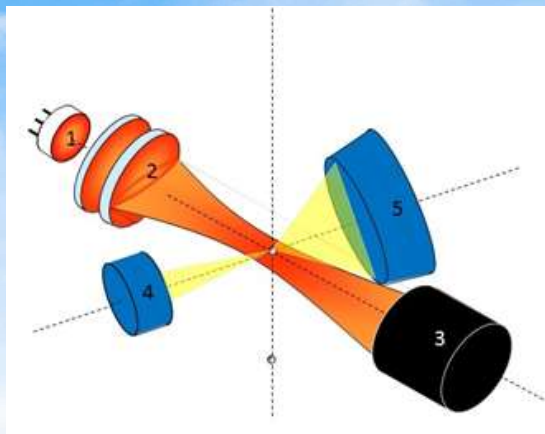


iMonPM

NEAR FEM OUTDOOR PARTICULATE MONITOR

This new Continuous Particulate Monitor measures simultaneously TSP - PM10 - PM2.5 - PM1, and provides particle counts for 6 sizes 10 μm , 5 μm , 2.5 μm , 1.0 μm , 0.5 μm , 0.1 μm .

It is designed for outdoor use with NEMA 4X enclosure and powerful **smart heater** that **completely eliminates** moisture-related measurement error encounters with other instruments, it can operate under 99.9% RH condition and provides accurate measurements since the optical chamber's internal relative humidity is kept under 50% at all time.



iMonPM optical cell
90° light scattering detection

1. Light source by laser diode.
2. Collimator generates laser curtain
3. Light trap assures low noise
4. Fast and robust photo diode detector
5. Reflector improves low detection limit



Highly compact and very light at only 1.7 pounds, this small instrument is loaded with features that you will not find on any other instruments:

- User friendly WiFi Interface to view values and set parameters.
- 3G,4G,LTE Modem to connect via cellular to our free Web Server
- Micro-SD card to save daily data files in CSV format at 1 minute interval

Values

Name	Value
PM 10 [$\mu\text{g}/\text{m}^3$]	1
PM 2.5 [$\mu\text{g}/\text{m}^3$]	1
PM 1 [$\mu\text{g}/\text{m}^3$]	0
TSP [$\mu\text{g}/\text{m}^3$]	1
Temperature int. [$^{\circ}\text{C}$]	28.93
Rel. Humidity int. [%]	29.99
Temperature ext. [$^{\circ}\text{C}$]	20.87
Rel. Humidity ext. [%]	54.02

Information

Name	Value
Software Version WiFi	V0.15 06.10.2021
Software Version CPU	V1.16 06.10.2021
Last SD-File	/14102021.csv
Identification	943CC622EFA40000
Last Transmission	14.10.2021 14:02:01
GPS-Coordinates	N 45.53292 W -73.81823
Last GPS Update (UTC)	14.10.2021 19:02:37
Error state	No Error

Micro SD card File Format

	A	B	C	D	E	F	G	H	I	J	K	L
	Column1	Column2	Column3	Column4	Column5	Column6	Column7	Column8	Column9	Column10	Column11	Column12
	Date/Time	PM 10	PM 2.5	PM 1	TSP	T_int	Hum_int	T_ext	Hum_ext	GPS Latitude	GPS Longitude	Error Status
1	01.01.2022 00:00:01	52	50	47	55	16.43	26.79	0.36	84.77	N 45.53296	W -73.81810	0
2	01.01.2022 00:01:01	53	49	47	55	16.40	26.82	0.36	84.77	N 45.53296	W -73.81810	0
3	01.01.2022 00:02:01	53	50	47	55	16.44	26.86	0.36	84.86	N 45.53296	W -73.81808	0
4	01.01.2022 00:03:01	54	50	47	56	16.40	26.86	0.38	84.85	N 45.53298	W -73.81804	0
5	01.01.2022 00:04:01	53	49	46	55	16.39	26.83	0.36	84.78	N 45.53298	W -73.81804	0
6	01.01.2022 00:05:01	53	49	47	56	16.37	26.95	0.34	84.79	N 45.53298	W -73.81805	0
7	01.01.2022 00:06:01	52	49	46	54	16.35	26.94	0.34	84.87	N 45.53298	W -73.81805	0
8	01.01.2022 00:07:01	53	49	47	56	16.35	26.99	0.31	84.97	N 45.53298	W -73.81805	0
9	01.01.2022 00:08:01	51	49	46	53	16.34	26.93	0.34	85.03	N 45.53298	W -73.81804	0
10	01.01.2022 00:09:01	52	49	46	55	16.33	27.01	0.29	85.03	N 45.53298	W -73.81805	0
11	01.01.2022 00:10:01	52	49	46	55	16.25	27.07	0.31	85.06	N 45.53296	W -73.81805	0

- GPS Coordinates
- Outdoor temperature and humidity
- Internal temperature and humidity (optical chamber)
- Very low power consumption suitable for solar operation
- Error message with flashing light if any component fail



FREE WEB SERVER ACCESS WITH OPTIONAL FTP SERVICE



Current values

Current values and datapoint status

Station	PVnr	date	Name	Value	Unit	Message
My iMon Demo 1	1000011	8.12.21 13:11:00	>0.3µm	1901	pcs/l	
My iMon Demo 1	1000012	8.12.21 13:11:00	>0.5µm	163	pcs/l	
My iMon Demo 1	1000013	8.12.21 13:11:00	>1.0µm	26	pcs/l	
My iMon Demo 1	1000014	8.12.21 13:11:00	>2.5µm	15	pcs/l	
My iMon Demo 1	1000015	8.12.21 13:11:00	>5.0µm	9	pcs/l	
My iMon Demo 1	1000016	8.12.21 13:11:00	>10.0µm	0	pcs/l	
My iMon Demo 1	1000009	8.12.21 13:11:00	Gps-Lat.	33,9834	Degr.	
My iMon Demo 1	1000010	8.12.21 13:11:00	Gps-Lon.	-84,3215	Degr.	
My iMon Demo 1	1000017	8.12.21 13:11:00	TSP	5	µg/m ³	
My iMon Demo 1	1000001	8.12.21 13:11:00	PM10	4	µg/m ³	
My iMon Demo 1	1000002	8.12.21 13:11:00	PM2.5	4	µg/m ³	
My iMon Demo 1	1000003	8.12.21 13:11:00	PM1	4	µg/m ³	
My iMon Demo 1	1000004	8.12.21 13:11:00	Temp.ext	10,1	°C	
My iMon Demo 1	1000006	8.12.21 13:11:00	Temp.int	25,2	°C	
My iMon Demo 1	1000005	8.12.21 13:11:00	Hum. ext	82,6	%	
My iMon Demo 1	1000007	8.12.21 13:11:00	Hum. int	29,6	%	

Web site: www.imonpm.com

Email: info@imonpm.com

Phone: 1-877-474-6602

(Canada & US)

Address:

PM Monitor, Division of GAC

1136 Hotel de Ville Blvd.

Laval, QC, Canada, H7X3P1

SPECIFICATIONS:

- Particle Size measurement: TSP, PM10, PM2.5, PM1
- Technology: 90° Light Scattering
- Range: 0 to 30,000 $\mu\text{g}/\text{m}^3$
- Accuracy PM 2.5 , 0 to 1000 $\mu\text{g}/\text{m}^3 \pm 10\%$
- Accuracy PM 10 , 0 to 1000 $\mu\text{g}/\text{m}^3 \pm 15\%$
- Sensor Life: >5 years
- Sampling Flow: 200 ml/min
- Operating Temperature: -40 °C to +85C
- Operating Humidity: 0 to 100% RH
- GPS Position
- External RH/Temp Sensor: 0 to100% RH, -40°C to +85°C
- Internal RH/Temp Sensor: 0 to100% RH, -40°C to +85°C
- Enclosure Dimension: 200mm x 120mm x 90mm (7.9 x 4.7 x 3.5 inches)
- Enclosure rating: NEMA 4X
- Overall Dimension : 280mm x 145mmx x 95mm (11.0 x 5.7 x 3.7 inches)
- Weight: 775g (1.7 lbs)
- AC Adapter (included) :Input 110-240 VAC, 50/60 Hz,Output: 12 VDC, 1.0A
- Total Power consumption with heater at maximum: 7.5 W
- Output values on website every minutes:
- TSP, PM10, PM2.5 ,PM1 and counts for 0.3, 0.5, 1.0, 2.5, 5.0 and 10 μm