

enviDUST

PARTICULATE MATTER MONITOR IN AMBIENT AIR

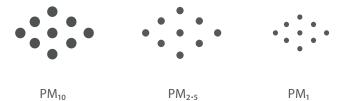


PARTICULATE MATTER MONITOR IN AMBIENT AIR

Do you want to know the air quality for the citizens of your city or town?

The enviDUST sensor unit is a device used for online monitoring of air quality in a specified location. For this purpose, it uses different types of sensors according to the customer's requirements for the monitored variables.

Dust sensor - monitoring the size and quantity of particles of PM_1 , $PM_{2.5}$, PM_{10} fractions in $\mu g/m^3$ working on optical principle in the effective range of 0-500 $\mu g/m^3$ (for PM_{10} and $PM_{2.5}$).



Measuring the mass concentration and number concentration of aerosol particles in real-time and simultaneously.

An optical method based on the light scattering principle.

Key benefits and features



Possibility to create local measurement networks.



Low acquisition costs compared to professional analyzers. No consumables required for operation low operating costs.

enviDUST Particulate Monitor



Compact unit with variable installation options.



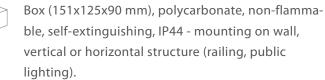
Online transmission of measured data using GSM + GPS technology.



Power supply - internal switching power supply with maximum output 25W input 230V/0,11A, output 5V/5A.



Operating temperatures: minimum ambient temperature -15°C, maximum ambient temperature +40°C.



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SMART ENVIRONMENT

www.envitech.eu



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TECHNICAL PARAMETERS

Measuring principle:	Optical light scattering
Measured variables:	PM_1 , $PM_{2,5}$ and PM_{10} , particle number concentration (also by individual size channels)
Dust sensor manufacturer:	Plantower, life span 18 - 24 months
Mass concentration:	0 – 500 μg/m³
Data averaging:	standard 10/60 min diameters
Average consumption:	3 Wh
Installation conditions:	-15 až +40°C
Power supply:	230V; 50/60Hz; alternative 5V (+/-0.1V), battery or solar panel power supply possible – requirement to be addressed by individual offer
Dimensions:	151x125x90 mm (H x W x D)
Casing:	IP44, aluminium bracket for mounting the station on the wall, vertical or horizontal construction (railings, public lighting)
Control unit:	BeagleBone Microcomputer



M20

The system can be connected to an electric power supply (solar panel option) and has a built-in LTE + SIM modem.

APPLICATIONS

- Dust aerosol measurement networks in urban environments
- Monitoring of dusty industrial plants
- Cleanroom monitoring
- Dust measurement in the working environment
- SMART CITY concepts
- Educational projects (both for schools and the professional public)
- Research projects
- Indicative dust measurement

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