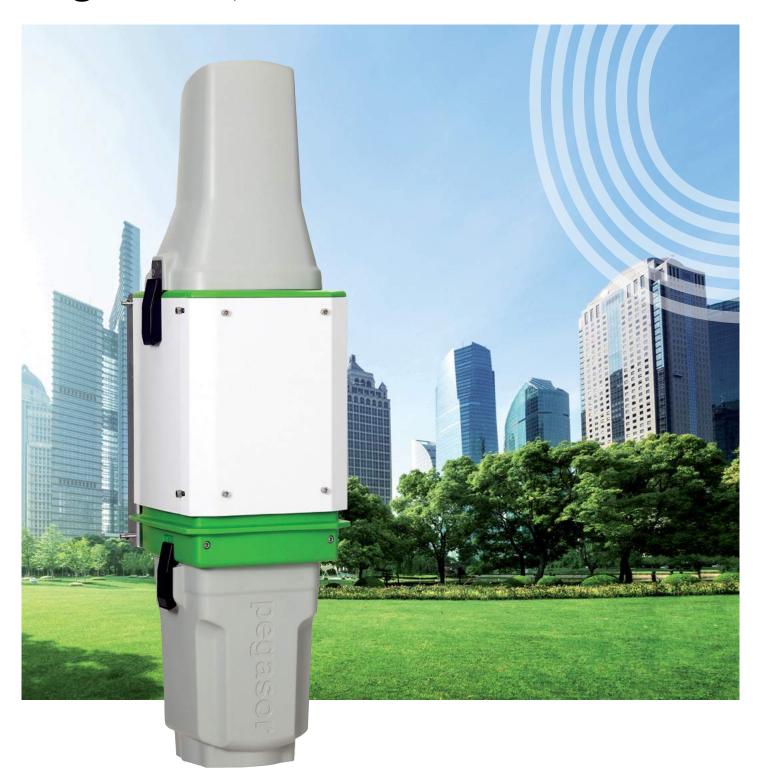


# Pegasor AQ™ Urban



### Pegasor AQ™ Urban



# Accurate feedback on outdoor air quality at city level

### What are we breathing

PM2.5 pollution is a well-known problem and monitoring PM2.5 concentration is a must. However, traditional PM2.5 monitoring methods are not sensitive to the most harmful, ultrafine particles, diameter below 0.1 micrometers. All Pegasor instruments are capable to detect particles larger than 0,01 um and thus measure also the most dangerous particles. Instrument heats the sample air to  $40^{\circ}$ C above ambient temperature, measuring the particles, not water.

### Pegasor AQ™ Urban

A perfect tool to get spatially and temporarily accurate air quality information at city level. Pegasor AQ™ Urban is suitable for various different environments, including highways, roads, industrial areas, residential areas and parks.

### **KEY FEATURES:**

- Very sensitive to ultrafine particles
- Tells particle mass concentration, particle number concentration or particle active surface area concentration
- Extensive self-diagnosis alarming in case of any suspicion of data quality
- Easy installation with little installation space
- Enfuser uses various data sources
- Various methods for data transfer including direct storage in the cloud
- Stable with no consuming parts
- Easy maintenance, ½-1 year maintenance period



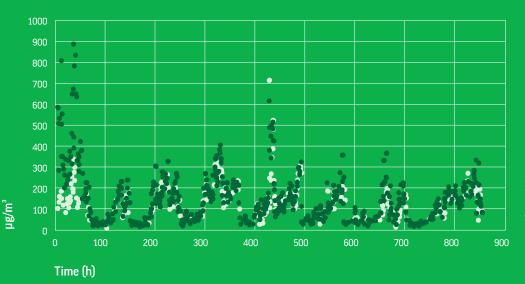
## What to do with the collected air quality data?

Pegasor equipment allows dense urban monitoring networks generate big data and also offers solution for data handling. The Enfuser air quality model converts data from Pegasor equipment to easy-toread air quality information for you to:

- know the air quality information at city and neighborhood level
- find centralized and distributed emission sources
- view city-wide distribution of pollution

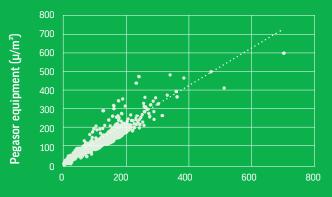
### **Pegasor AQ™ Urban Equipment Specifications**

| Smallest detectable particle diameter | 0.01 μm   |
|---------------------------------------|---|
| Mass concentration range              | 1 - 100 000 µg/m3   |
| Number concentration range            | 1000 - 100 000 000 1/cm3                                  |
| Data transfer                         | Modbus over Ethernet (wired) Optionally wireless 3G modem |
| Data rate                             | Adjustable 1-3600 s                                       |
| Power                                 | 230 VAC 50 Hz, 100 W                                      |
| Dimensions (DxWxH)                    | 320mm x 250mm x 1000mm                                    |
| Weight                                | 20 kg   |



PM2.5 comparison between Pegasor Urban Air Quality Monitoring Equipment and reference instrument from automated measurement station. Two first days are used to provide the calibration coefficient for Pegasor Equipment (Figure: Dr Hongjun Mao, Nankai University).

- Pegasor Urban Air Quality Monitoring Equipment
- Reference instrument from automated measurement station



y=1,0312x + 4,3821 R<sup>2</sup>= 0,9041

PM2.5 measurement correlation between Pegasor Urban Air Quality Monitoring Equipment and reference instrument from automated measurement station (Figure: Dr Hongjun Mao, Nankai University).

Automated station reference instrument (µ/m³)



Pegasor provides unique fine particle sensor products. Our products are based on diffusion charging of particles, technology capable of covering all fine particle monitoring applications, such as ambient and indoor air quality monitoring and emission measurements. Same measurement principle makes all measurements comparable. This is a key feature in combining measurements from different spots into wider information base.

Our technology and sensors are a result of acknowledged and solid scientific research, as well as extensive track record of industrial fine particle measurements. Our products are available throughout Asia, Europe and North America through via comprehensive network of local distributors and leading manufacturer partners.

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