

AirDMS

AirDMS is a comprehensive and extremely easy-to-use cloud air pollution management system. It collects data from **ambient air monitoring networks, single monitoring stations** as well as **IoT sensors**. It is possible to access the data via any computer, tablet, smart phone connected to the cloud, while access is guaranteed, depending on the permissions set forth for each user.

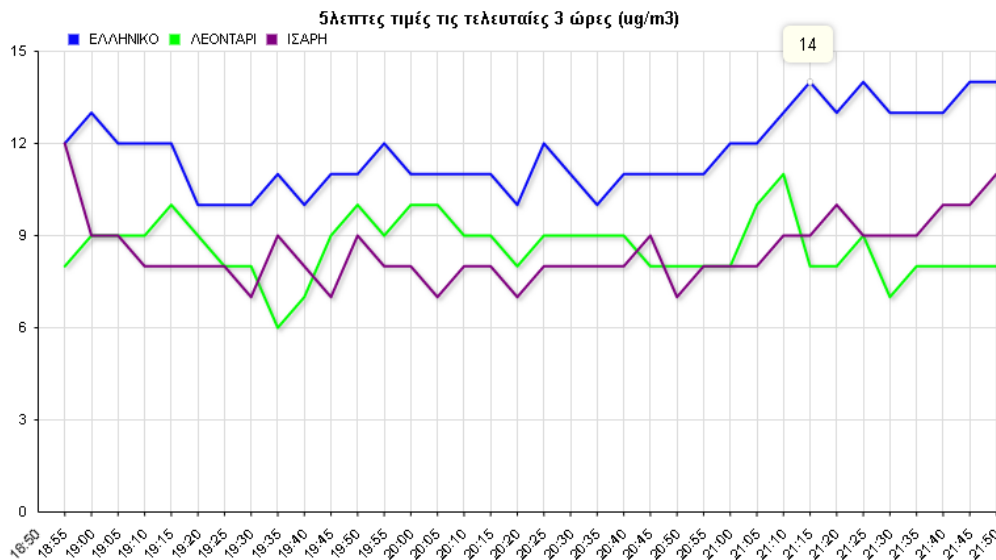
The presentation of the data is done in a simple and understandable way, through graphs, tables and environmental indices. Through a management program that is installed on the main computer of the network or station logger (depending on the application and complexity of the network), the data that is stored in the relational database of the cloud control system is pushed in real time (5 minutes). Station technicians can enter status and calibration reports of the stations.

Station reports and data (current data, historical data, dynamic graphs and station status reports) may be accessible to the general public or to only authorized users. In the case of authorized users, the system is accessed with strong encryption to ensure data security. Failed and successful system entry attempts are recorded for security control by the system administrator.

The user can choose from a number of reports in tabular or graphical format while he can quickly review the data through dynamic references in maps or other user specific custom views.

Available reports:

* Station reports - Daily, Weekly, Monthly, Periodic.



- * Reports of a pollutant at all available stations.
- * Indexes - pollution, discomfort, cold feel, etc.

| Ημερομηνία | ΕΛΛΗΝΙΚΟ | ΛΕΟΝΤΑΡΙ | ΙΣΑΡΗ |
|------------|----------|----------|-------|
| 22/04/2020 | 1 | 1 | 1 |
| 23/04/2020 | 1 | 1 | 1 |
| 24/04/2020 | 1 | 1 | 1 |
| 25/04/2020 | - | 1 | 1 |
| 26/04/2020 | - | 1 | 1 |
| 27/04/2020 | - | 1 | 1 |
| 28/04/2020 | - | 1 | 1 |

| Δείκτης Ρύπανσης | 1-3 | 4-6 | 7-9 | 10 |
|-----------------------|---|---|---|--|
| Επιπτώσεις στην υγεία | Επιπτώσεις σπάνια παρατηρούνται ακόμα και σε ευαίσθητες ομάδες πληθυσμού. | Μείριες επιπτώσεις μπορεί να παρατηρηθούν σε ευαίσθητες ομάδες πληθυσμού. Σπάνια χρειάζονται μέτρα. | Επιπτώσεις σπάνια μπορεί να παρατηρηθούν σε ευαίσθητες ομάδες πληθυσμού. Συχνά απαιτούνται μέτρα που αποσκοπούν στην απομείωση της μόλυνσης για πολύ χρόνο σε μεμονωμένες περιοχές. Όσο υποφέρουν από άσθμα νιώθουν έντονη δυσφορία στους πνεύμονες κατά την αναπνοή. | Καροτηράριον οι επιπτώσεις σε ευαίσθητα άτομα. |

[Περισσότερες πληροφορίες...](#)

- * Calibration reports.
- * Error reports.

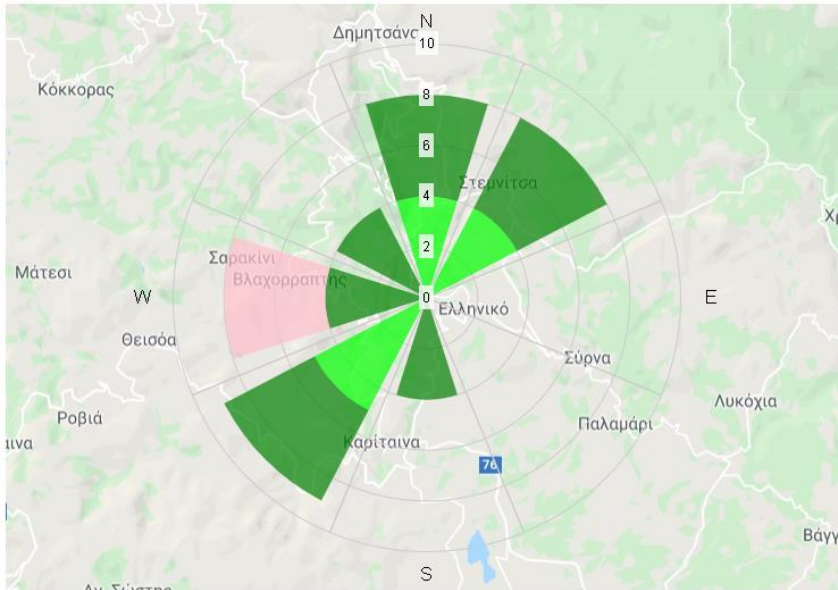
Dynamic reports:

- * Current measurements of one or more stations.
- * Last download of data for each station.
- * Dynamic map with station locations and pollution index values.
- * Dynamic map with station locations and wind vector.
- * Dynamic representation of environmental indicators.
- * Dynamic representation of meteorological parameters.

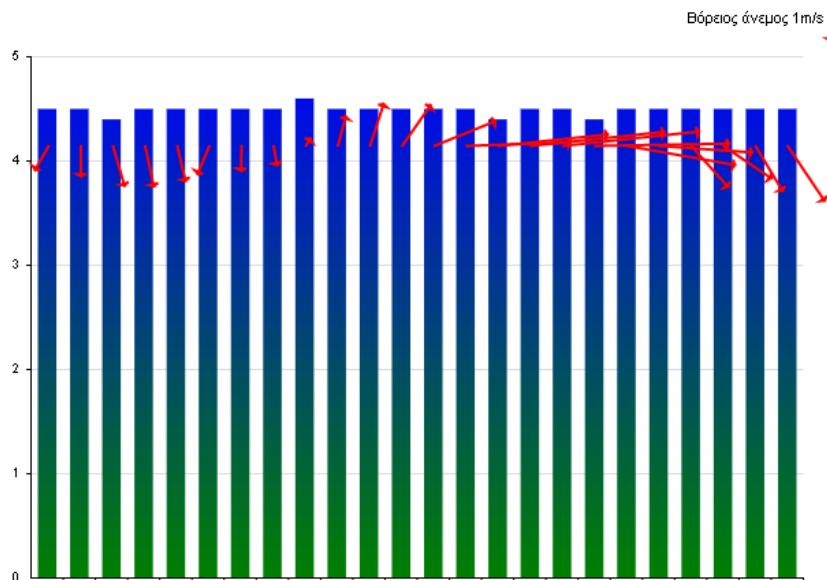


To process the measurements, standard analyses are available, such as:

- * Wind diagram.
- * Pollution rose.



- * Daily wind vector diagram along with pollution.

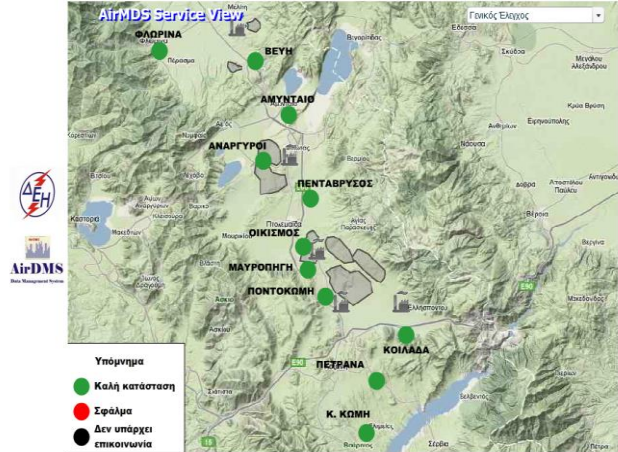


- * Group pollution chart at all stations.
- * Pollution chart along with National / international pollution limits.
- * Comparative graph of parameters or stations.
- * Data output ASCII, xls, pdf formats. Others on request.

The application has its own API and can be configured/adjusted to meet other users data export needs. All above are finalized according to the requirements of each customer. Customization is a paid option.

AirDMS-Service

AirDMS-Service is an internal sub-application of the cloud application AirDMS. With AirDMS-Service, the diagnostic parameters of the analyzers that are connected to the collection system of each station are displayed. Along with the parameters, the acceptable parameter ranges are given so that in case of an error it is easy even for non-specialized personnel to locate the error. In addition, with a voltage monitor and station thermometer it is possible to monitor these parameters and evaluate operating conditions of the measuring equipment.



AirDMS-Service automatically generates alarm messages. The option is free and programmable by the network administrator and pushing is performed via email to immediately notify selected users and / or the maintainer of any problems as they occur at a measuring station.



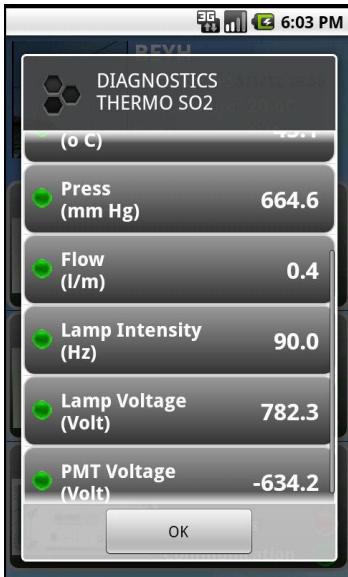
Διαγνωστικά σταθμού:

| Ημερομηνία | 19/09/2019 12:00 | Ελάχιστη τιμή | Μέγιστη τιμή |
|---------------------------|------------------|---------------|--------------|
| SO ₂ Conc(ppb) | 2.25 | 0.000 | 0.000 |
| Internal Temp(°C) | 34.20 | 15.000 | 45.000 |
| Chamber Temp(° C) | 45.20 | 43.000 | 47.000 |
| Press(mm Hg) | 999.90 | 400.000 | 1000.000 |
| Flow(l/m) | 0.46 | 0.350 | 0.750 |
| Lamp Intensity(Hz) | 91.00 | 40.000 | 100.000 |
| Lamp Voltage(Volt) | 801.67 | 750.000 | 1200.000 |
| PMT Voltage(Volt) | -634.60 | -1200.000 | -400.000 |

| Ημερομηνία | 10/10/2019 23:50 |
|------------|------------------|
| NO C Low | 🔴 |
| NO C High | 🟢 |
| NO2 C High | 🟢 |
| NOx C Low | 🟢 |
| NOx C High | 🟢 |
| Press Low | 🟢 |
| Press High | 🟢 |
| Flw Low | 🔴 |
| Flw High | 🟢 |
| Oznr Low | 🟢 |
| Temp Low | 🟢 |
| Temp High | 🟢 |

AirDMS Mobile

AirDMS Mobile is an optional Android application (not included in the main AirDMS cloud application) with which it is possible to monitor the good operation of the critical operating parameters of ambient air analyzers as well as the station operating parameters of air quality measuring stations from mobile devices (mobiles and Tablets).



The good operation of an analyzer which measure one or more gaseous pollutants requires constant monitoring of its operational status by the technicians of a network, so that they intervene immediately to avoid recording incorrect measurements and further destruction of equipment. In addition, the operating parameters of a station (internal temperature, mains voltage) are important for the proper operation of the analyzers and the avoidance of these faults. In order to minimize the cost, especially in an extensive network of stations, it is advisable to monitor it using the internet and in fact with a use of "smart" mobile devices (phones - tablets).

With the AirDMS application it is possible for an analyzer whose flow is low (for example due to a hole in the pump diaphragm) or the temperature of the nitrogen cooler is high (for example due to high temperature at the station due to air conditioning failure) to pinpoint the damage immediately. Unnecessary visits of technicians (Time-consuming – costly) are avoided as they travel to the stations only in cases of damage and go prepared with the correct replacement parts.

The application presents in a simple and understandable way the functional parameters of the analyzers (those that are available for each analyzer) but also basic parameters such as the internal temperature and the mains voltage in a station. On the home screen the user can see on a map or table all the stations of the network he is monitoring and the color of the station's location is displayed depending on its operating status.

