

# INDUSTRIAL AIR OZONE GAS MEASURING AND CONTROL DEVICE OAC19 USER MANUAL

ENGINEERING SOLUTIONS IN OZONE SYSTEMS



## ABOUT OAC19

#### **About Ozone Gas Meter**

OAC19 model ozone gas measurement and control devices are used to measure the ozone gas P.P.M. (Parts Per Millions) unit, measuring the humidity and temperature in the environment, controlling the necessary external devices of ozone gas, and collecting the data received in one source.

OAC19 model ozone gas control device is digital, controls can be made analog or digital. Calibration of the device has been completed at the factory.

The device can be managed over an internet network, so that the data on the device can be continuously observed from the computer. The humidity, temperature and P.P.M. Different probes can be preferred according to the value.

NOTE: When the control panel is accessed by Teknozone, it can remotely control all the information of all customers included in the internet sensor portal and monitor all reports and statistics. (Valid for companies with portal membership.)

\*\*\* All customers, regardless of whether they are a portal member or not, can benefit from general OTA (Over the Air) software updates if they can access the wide network (if connected to the internet).

## **Technical Properties**

Brand	Teknozone
Model	OAC19
Measuring Range	0.02 PPM ile 10.00 PPM
Sensor	Heated Electrochemical
Sensitivity	0.01 PPM first response
Reaction time	Within 3s when the gas reaches the sensor
Working Temperature	-10 °C / 55°C
Working Humidity Range	%15 RH / %90 RH
Working Voltage	24 VDC / 220V 50Hz
Case	PVC
Sizes	155*260*95 mm
Sensor Cable Lenght	100 m. (max.)
Relay Outputs	1 piece
Analog Outputs	0-5 VDC
Weight	576 grams

## **DESCRIPTION OF DEVICE**



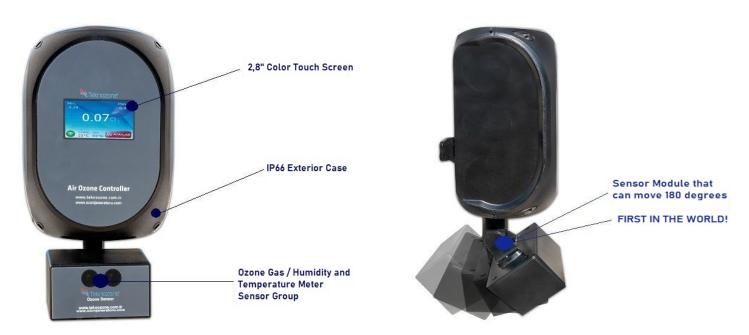


Figure 1-Control Panel Front View and Screen

**COLOR TOUCH SCREEN:** The color touch screen is 2.8 " and shows data such as ozone gas lower value, upper value, 0 set value and PPM value for analog output. All of the operations that can be done on the device are controlled from this screen.

**SENSOR GROUP:** It is the group within the sensor module that measures the heated electrochemical sensor (ozone gas measurement sensor) and the ambient humidity / temperature values.

**MOVABLE SENSOR MODULE:** It is a module that has 180 degree maneuverability and contains a sensor group that can be adjusted manually according to the flow direction.

**IP66 EXTERIOR CASE:** Dust-proof and water-resistant casing. It is produced according to the standard of IEC 60529.

<sup>\*\*\*</sup> The sensor module is not in IP66 Protection Class.

<sup>\*\*\*</sup> If chemical washes are carried out in the areas where the device is located in your factory, the OAC19 ozone gas measurement device must be protected. See Working Conditions and Warnings

# **WORKING CONDITIONS AND WARNINGS** Teknozon



- The probe was operated in standard room conditions (in an environment without ozone gas and other gases) for the first 48 hours and all calibration processes were completed by Teknozone. (Energizing the sensor module is sufficient.)
- The probe is affected by sudden weather changes (temperature and humidity) and adapts to the environment after a while. This can damage the probe.
- Nitrogen Dioxide, Chlorine, etc. Volatile, corrosive gases, organic solvents can greatly affect the measurement values. This may affect measurement results, cause unstable operation or permanently damage the probe.
- The probe does not work as expected in an environment with low oxygen gas concentration (below 19% concentration). It damages the probe.
- The probe should not be subjected to sudden shocks and continuous vibration. It damages the probe.
- The probe should never come into contact with water and / or other liquids. It damages the probe.
- Contact with high concentration organic gases should be avoided. It damages the probe.
- It should not be subjected to ozone gas in continuous high concentration (more than 1 hour exposures above 5 ppm). It damages the probe.
- The probe should be protected from direct contact with the outlet of the ozone gas source. It damages the probe.
- The probe should not be exposed to high convectional air currents. It damages the probe.
- The probe should never be touched with hands or sharp objects. It damages the probe.
- The probe can work between -10 and 50 degrees Celsius.
- The probe can operate in a humidity range of 15% to 90% (non-condensing).
- Temperature and humidity probe measures temperature with 2 ° C error margin between 0 and 50 °C, and humidity with 5% RH error between 20-90 RH.
- Sensor Module operating voltage is 24V DC.

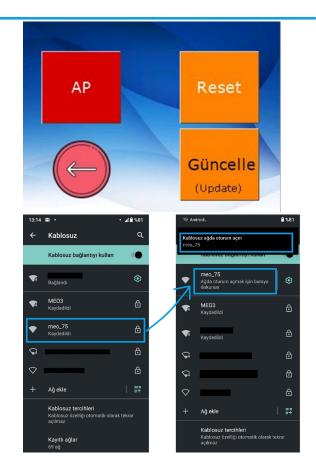
### **IMPORTANT!**

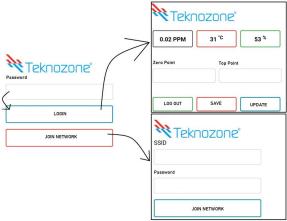
- \*\*\* The service life of the probe is 2 years if the above mentioned working conditions and warnings are observed.
- \*\*\* If the above mentioned working conditions and warnings are not followed, the service life of the probe is shortened, zero value drift occurs, permanent damage occurs or becomes inoperable.
- \*\*\* The probe is not guaranteed as its service time varies according to the conditions of use.

# **OPERATING THE DEVICE**



- Mount or place the device on the application point,
- Connect the power adapter to the power input socket of the device,
- Connect the adapter to the socket,
- Wait 30 seconds after the device screen turns on,
- \_Click on the wireless sign on the screen. Click the AP button on the redirected page.
- When OAC19 is turned on for the first time, it will wait 5 minutes in AP mode if there is no internet connection. During this 5 minutes, you can connect the device to the network and check all the settings from the web address (http://devicename/) and see the measurement values.
- The device you switched to AP mode is waiting for you to connect to the network. In this mode, the device acts just like a modem and stops data transmission in the background.
- Connect by clicking on the device name on your phone / tablet or computer.
- After pressing the login button on the WIFI screen, page number 1 is displayed, enter the password given to you by Teknozone and click the login button. The device will automatically turn off the AP mode and start working.
- In order to access the web server, it will be sufficient to write the device name written on the screen of the device to the browser on a device connected to the same network. Then enter the password given to you by Teknozone. Press the login button.
- Click the Join Network button to view all devices from a single screen, enter the modem SSID and password.
- Enter the password given to you by Teknozone in order to view the Meo3 module and track your device online. Press the login button.





If you have a portal membership, you can access it remotely from www.teknozonesensor.com and monitor the report values and statistics of the recorded data on the MeO3 panel.

# **REMOTE ACCESS**



Portal membership is required to remotely monitor and control devices and to view data up to 1 month in the past. Please contact the sales representative for portal membership.

Internet access is required for each device to monitor the devices remotely.

The data of customers who are members of the portal are stored for a period of 1 month. (If accessing wide network)

Portal member customer can report each sensor module data independently in the desired date range (Last 1 month) with hourly averages to Excel environment (CSV format).

Ozone gas, temperature and humidity entries between 2 desired date intervals (last 1 month at most) can be reported on an hourly average.

IMPORTANT: Data exceeding 1 month will be automatically deleted.

# **NOTE**



- 1) In order for customers who do not have a portal membership to enter their set values remotely, a query opportunity to check our server once an hour will be provided. (Teknozone reserves the right to change the query times)
- 2) Our sensor modules, which we will install for our customers in order to ensure customer information security, do not open ports to the wide network from the local network, our servers cannot directly access and send data to sensor modules. On the contrary, sensor modules send queries to our servers at specified intervals and request and save changes in set values.
- 3) Sensor modules of customers with portal membership check our servers once every 60 seconds, unless there is a different special application, leave data and take the set values, if any. (Query times may vary depending on the sensor module. Teknozone reserves the right to change the query times.)
- 4) Our servers are located in Google data centers. A backup is taken every 24 hours. (Teknozone reserves the right to change the data center.)
- 5) Teknozone reserves the right to change all information flow and conditions with the purpose and / or condition of ensuring information security, on condition of prior notice.
- 6) The product bears the CE check mark; Teknozone declares compliance with applicable EU safety regulations and EMV regulations.