STATION

CityAir

USER MANUAL

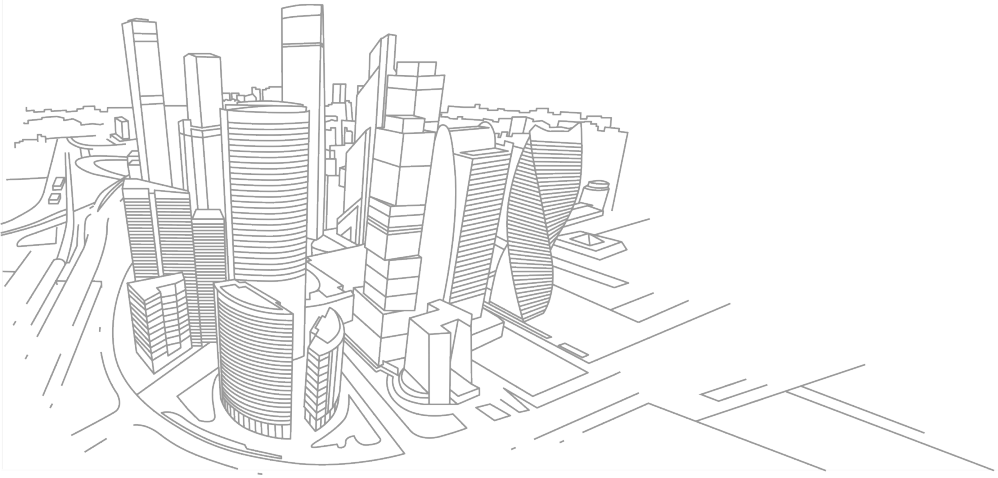

TABLE OF CONTENTS

PRODUCT OVERVIEW 5
OPERATION DESCRIPTION 6
INTENDED USE 8
MAINTENANCE 10
REPAIR, STORAGE, TRANSPORTATION, AND DISPOSAL 11
MANUFACTURER'S WARRANTY 12
ACCEPTANCE 13
SPECIAL NOTES 14

Dear customer, thank you for choosing our product!

We recommend you to carefully read the information contained in the owner's manual before using CityAir Station. The manual describes product features, its operating principles, and functional capabilities to help the user to use it correctly.

As we continuously improve the product in the best interests of our users, the design and functionality of equipment you purchased may slightly differ from what is described in this manual.

If appropriately used, CityAir Station does not pose risks to the health and safety of people and of the environment.

PRODUCT OVERVIEW

CityAir Station (further—station, device) with the built-in CityAir Dust Aerosol monitor is designed to collect data about the quality of the ambient air (mass fraction of aerosol particles, temperature, relative humidity, air pressure) in real time and transfer it to the server via wireless communication channels.

Stations can be placed inside and outside of premises.

CityAir Station

CityAir Dust Aerosol monitor

Components list

CityAir Station with the built-in CityAir Dust Aerosol monitor	1 piece
User manual	1 piece
Package	1 piece

OPERATION DESCRIPTION

The station receives the results of mass fraction of aerosol particulates measurements (PM2.5, PM10) from the built-in CityAir Dust Aerosol monitor and meteorological parameters (temperature, relative humidity, air pressure) from the meteorological sensor. The station transfers the received data to the server via GSM and Wi-Fi. Afterward, the data are displayed on the website cityair.io.

The station can be complemented with extension modules:

- CityAir G1 Extension module (measures concentrations of nitrogen dioxides NO_2, ozone O_3 and carbon monoxide CO in the ambient air);
- CityAir G2 Extension module (measures concentrations of hydrogen sulfide H_2S and sulfur dioxide SO_2 in the ambient air).

Station components

1—GSM antenna
2—ducting for air-sampling
3—mounting bracket
4—temperature, humidity and pressure sensor (housed in a solar radiation shield)
5—power cord cable
6—GPS antenna
7—battery on/off button
8—extension module connector
9—service connector

Performance characteristics

- Data transmission channels: GSM, Wi-Fi
- Battery life: 24 hours
- Weight: max. 9 kg
- Dimension (without cable): max. 150 × 320 × 420 mm
- Sealing: IP53
- Power supply: 100–240 V~, 50/60 Hz
- Rated power input at normal climate conditions: 22 W*
  * Parameters are given for a station with the fully charged built-in battery.

Operating conditions

- Operating temperature: from -40 to +50 °C
- Relative humidity of ambient air at the temperature of 25 °C:
  from 0 % to 100 %
- Air pressure: from 600 to 850 mm Hg. st.

Measured parameters

Parameter	Range of values	Maximum possible error	
		Reduced, %	Relative, %
PM2.5, µg/m3	0 – 0.1	± 25	–
	0.1 – 1.6	–	± 25
PM10, µg/m3	0 – 0.1	± 25	–
	0.1 – 3.0	–	± 25
Temperature, °C	-40 ... +50	± 1	± 1
Humidity, %	0 – 100	± 3	± 3
Pressure, mmHg	600 – 850	± 1	± 1

INTENDED USE

Before use

After taking the station out of the package, make sure that the supply is complete and not damaged.

> The station must not be used in case the casing, cable, connectors are damaged or there are some components absent. Contact the distributor for further instructions.

Connecting the station

1. Place the station in the measuring area.

> The station must be mounted by the user or manufacturer by using their own mounting tools and accessories.

2. Press the "BATTERY ON/OFF" button.
3. Connect the station to the mains ~100–240 V, 50/60 Hz by using the power cord. You will hear **one short** sound signal.
4. The self-testing process will start. The self-testing process may take up to 30 s. In case of success, you will hear **one long** sound signal.

> **A series of short sound signals** means that there is a malfunction. Please, contact the Technical Support service (see the last page of this manual for the contacts).

5. Make sure that the station successfully connected to the mains and server by following the below procedure.

Connection test

1. Go to cityair.io/mill.
2. In the "Device serial number" field, enter the serial number of the station in a format CAXXPMXXXXXX. You can find the serial number of your device on its casing and in the Acceptance section of this manual.
3. Check up on the status of the station (online/offline) and make sure that it is connected to the mains in the corresponding fields of the table.
4. Make sure that the "Last sent data" field provides current time within the last two minutes. By default, data are transferred to the server once a minute.
5. The station operates in automatic mode and does not require any other manipulation.

Extension modules

Carefully read user manuals for extension modules to get detailed information about measured parameters and their connection procedure.

Viewing data of measurements

You can view data of measurements in your user account. Go to cityair.io/user-manual/ to learn how to get access to your account.

Disconnecting the station

1. Release the "BATTERY ON/OFF" button.
2. Disconnect the device from the mains.
3. Dismount the station and put it into the package.

MAINTENANCE

Maintenance during storage

During storage, the maintenance must be performed by the user **every six months**.

1. Take the station out of the package.
2. Carefully examine the casing, connectors, and cable. In case of any damage, contact the Technical Support service (see the last page of this manual for the contacts).
3. Press the "BATTERY ON/OFF" button.
4. Connect the station to the mains ~100–240 V, 50/60 Hz. After that, the built-in rechargeable battery will start charging.

> The full charge time takes at least 5 hours.

5. After 5 hours, release the "BATTERY ON/OFF" button and disconnect the device from the mains.
6. Put the station in the package.

Maintenance during operation

Maintenance during operation is performed by the manufacturer annually.

REPAIR, STORAGE, TRANSPORTATION, AND DISPOSAL

Repair

In case of the station's malfunction or damage of the casing, connectors or cable, contact the Technical Support service (see the last page of this manual for the contacts).

Storage

Store the station in premises under normal climatic conditions (ambient air temperature from 15 °C to 35 °C, relative humidity from 45 % to 80 %, air pressure from 630 to 800 mmHg). Storage in the manufacturer's package is preferable.

Store the station with the released "BATTERY ON/OFF" button, it will protect the battery from self-discharge.

Transportation

The way the station is packaged and fastened has to secure its stable position and eliminate the risk of mechanical impact.

Disposal

The station does not pose a danger to life, the health of people, or the environment. Contact the Technical Support service to get detailed information on the disposal procedure (see the last page of this manual for the contacts).

MANUFACTURER'S WARRANTY

1. Guaranteed service life is 12 months from the date of sale within the time of its guaranteed storage life.

2. Guaranteed storage life is 6 months from the acceptance day (specified in the Acceptance section of this manual). The station must be stored in a package.

3. The manufacturer undertakes to repair or replace the station free in case of its failure within its guaranteed service life (under the condition that the user followed the rules of its transportation, storage, and use).

4. If you have any questions about the use, maintenance, post-warranty repair of the station or any suggestions on its improvement, use the following contacts:

tel. 8 800 500 7832 or service@cityair.ru

ACCEPTANCE

CityAir Station

SERIAL NUMBER

VERSION

with the built-in CityAir Dust Aerosol monitor

SERIAL NUMBER

VERSION

has been manufactured as per applicable documents and accepted for use.

ACCEPTANCE STAMP

acceptance date

SPECIAL NOTES

Designed by:
CityAir LLC, Tion Group of Companies
and
Uniscan Research LLC

Manufacturer:
Uniscan LLC
4/26 Arbuzova Street, Novosibirsk, Russian Federation
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Technical support:
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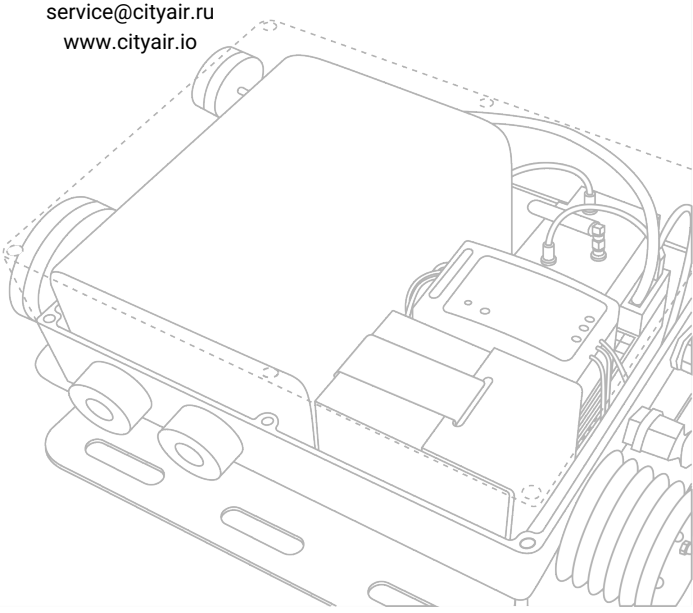
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