

CityAir Monitoring Station

CityAir Monitoring Station collects data about the ambient air quality in realtime and transfers it to the server via wire and wireless channels.

CityAir Monitoring Station can be complemented with extension modules, for example, G1 and G2 modules to measure gas concentration in the ambient air.



Performance

| | |
|----------------------------|-------------------------------|
| Data transmission channels | GSM, Wi-Fi, Ethernet, NB-IoT* |
| Navigational systems | GPS, GLONASS |
| IP rating | IP53 |
| Dimensions | 150 × 320 × 420 mm |
| Weight | 10 kg |
| Power supply | 100–240 V~, 50/60 Hz |
| Power consumption | 22 W** |
| Autonomous operation | 24 hours |

Operating conditions

| | |
|-------------|----------------------------|
| Temperature | from -40 to +50 °C |
| Humidity | from 0 % to 98 % |
| Pressure | from 600 to 850 mm Hg. st. |

* Optional

** Parameter is given for normal climate conditions at the fully charged built-in battery.

Particulate matter measurements

| Parameter | Range, mg/m³ | Accuracy, % |
|-----------|--------------|-------------|
| PM2.5 | 0 – 1.6 | ±25 |
| PM10 | 0 – 3.0 | ±25 |
| TSP | 0 – 6.0 | ±50 |

Meteorological measurements

| Parameter | Range | Accuracy |
|----------------------|-----------|----------|
| Temperature, °C | -40 – +50 | ±1 |
| Humidity, % | 0 – 100 | ±3 |
| Pressure, mm Hg. st. | 600 – 850 | ±1 |

G1 Module

An extension module used to measure concentrations of nitrogen dioxide NO₂, ozone O₃ and carbon monoxide CO in the ambient air.

Performance

| | |
|---------------------|--------------------|
| Operation principle | electrochemical |
| Weight | 3 kg |
| Dimensions | 205 × 205 × 255 mm |
| IP rating | IP53 |
| Electric parameters | 12 V ==, 100 mA |



Measured parameters

| Parameter | Range, mg/m ³ | Accuracy, % | |
|-----------------------------------|--------------------------|-------------|----------|
| | | Reduced | Relative |
| Nitrogen dioxide, NO ₂ | 0 – 0.100 | ±25 | - |
| | 0.100 – 0.800 | - | ±25 |
| Ozone, O ₃ | 0 – 0.080 | ±25 | - |
| | 0.080 – 0.500 | - | ±25 |
| Carbon monoxide, CO | 0 – 1.0 | ±25 | - |
| | 1.0 – 50.0 | - | ±25 |

G2 Module

An extension module used to measure concentrations of hydrogen sulfide H₂S, sulfur dioxide SO₂ in the ambient air.

Performance

| | |
|---------------------|--------------------|
| Operation principle | electrochemical |
| Weight | 3 kg |
| Dimensions | 205 × 205 × 255 mm |
| IP rating | IP53 |
| Electric parameters | 12 V ==, 100 mA |



Measured parameters

| Parameter | Range, mg/m ³ | Accuracy, % | |
|------------------------------------|--------------------------|-------------|----------|
| | | Reduced | Relative |
| Hydrogen sulfide, H ₂ S | 0 – 0.008 | ±25 | - |
| | 0.008 – 0.600 | - | ±25 |
| Sulfur dioxide, SO ₂ | 0 – 0.100 | ±25 | - |
| | 0.100 – 2,200 | - | ±25 |