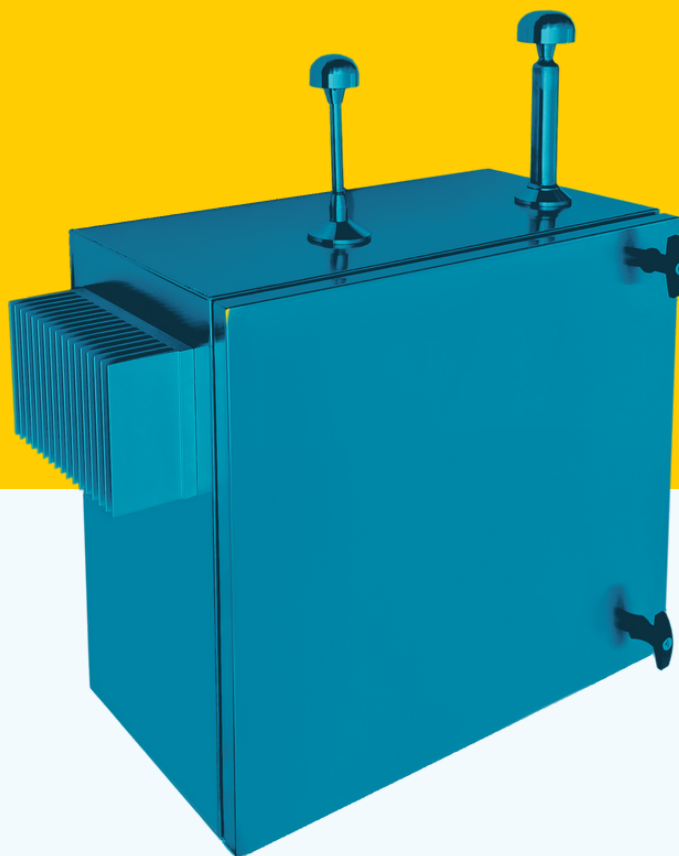


## **Sentinel**

### **Environmental Monitoring Station**

### **FD-OM100**



Professional near-reference+ station for measuring gases, particulate matter, VOCs, and environmental noise. Offers high accuracy, low-cost operation, climate-controlled stainless steel enclosure, air sample conditioning, and dedicated acoustic measurement module. Real-time data transmission via multiple communication interfaces.

#### **Features**

- › Real-time measurement of fractions  $PM_1$ ,  $PM_{2.5}$ ,  $PM_4$ , and  $PM_{10}$
- › Simultaneous monitoring of up to 7 gases
- › Integrated VOC and noise sensors (Class 1 IEC 61672)
- › Resistance to harsh weather conditions
- › Remote access via wired or wireless network
- › Maintenance-free operation and easy integration with telemetry systems
- › Continuous 24/7/365 operation with automatic data logging

#### **Applications**

- › Urban air quality monitoring
- › Smart City and ITS Projects
- › Industrial zones
- › Scientific research and educational projects





FAR DATA

## Sentinel

### Environmental Monitoring Station

### FD-OM100

#### Gases

|                       |                                                                                                                                                                 |
|-----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Measurement method    | Electrochemical/NDIR/PID                                                                                                                                        |
| Standard              | O <sub>3</sub> , NO <sub>2</sub> , CO, SO <sub>2</sub> , TVOC, NO, NO <sub>x</sub> , CO <sub>2</sub> , H <sub>2</sub> S, HCl, NH <sub>3</sub> , CH <sub>4</sub> |
| Max gases per station | 7                                                                                                                                                               |
| Sample Inlet          | omni-directional inlet                                                                                                                                          |
| Air sampling          | Pump with controlled air flow, climate-controlled chamber                                                                                                       |

#### Particulate Matter

|                    |                                                                             |
|--------------------|-----------------------------------------------------------------------------|
| Measurement method | Optical Particle Counter (OPC) laser 660 nm                                 |
| Fractions          | PM <sub>1</sub><br>PM <sub>2.5</sub><br>PM <sub>4</sub><br>PM <sub>10</sub> |
| Range              | 0...2000 µg/m <sup>3</sup>                                                  |
| Resolution         | 1 µg/m <sup>3</sup>                                                         |
| Accuracy           | 5 µg/m <sup>3</sup>                                                         |
| Sample Inlet       | omni-directional heated inlet                                               |

#### Noise

|                                 |         |
|---------------------------------|---------|
| Urban Noise Monitoring Terminal | Class 1 |
|---------------------------------|---------|



FAR DATA

Far Data Sp. z o.o.

Lipowa 3, 30-702 Kraków • Tel. 12 255 99 99  
biuro@fardata.pl • www.fardata.pl



## Communication & Data Handling

|                          |                                                                                                                                                                                         |
|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Communication Interfaces | RS232 (2)<br>RS485 (2)<br>Ethernet (2)<br>Wi-Fi (RP-SMA female connector)<br>Bluetooth (RP-SMA female connector)<br>GSM/LTE (FME male connector)<br>GPS (SMA female connector)<br>USB-A |
| Control Outputs          | 6 programmable output channels                                                                                                                                                          |
| Data storage             | internal memory<br>SD card<br>USB                                                                                                                                                       |

## Operating System

|       |         |
|-------|---------|
| Linux | OpenWRT |
|-------|---------|

## Power Supply

|                   |                          |
|-------------------|--------------------------|
| Supply voltage    | 230 VAC or 12 VDC        |
| Power consumption | 200 W with heating inlet |
| Surge protection  | Yes                      |





FAR DATA

## Sentinel

# Environmental Monitoring Station FD-OM100

### Environmental

|                             |                          |
|-----------------------------|--------------------------|
| Operating temperature range | -35...60 °C              |
| Operating humidity range    | <99% RH (non-condensing) |
| Compliance                  | CE Declaration           |

### Physical

|                         |                                       |
|-------------------------|---------------------------------------|
| Ingress Protection (IP) | IP65                                  |
| Dimensions              | 600x600x300 [mm] (without collectors) |
| Weight                  | 40 kg                                 |



FAR DATA

Far Data Sp. z o.o.

Lipowa 3, 30-702 Kraków • Tel. 12 255 99 99  
biuro@fardata.pl • www.fardata.pl





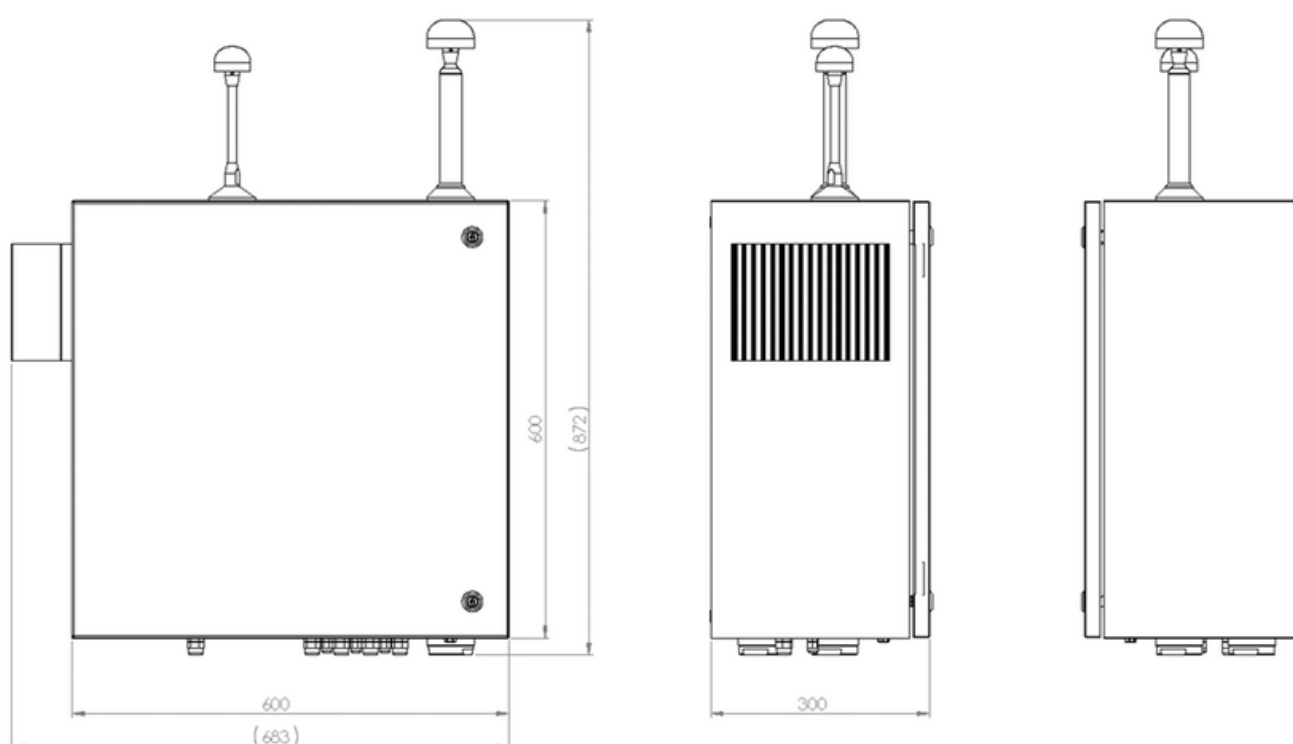
FAR DATA

**Sentinel**

**Environmental Monitoring Station**

**FD-OM100**

## Dimensions



FAR DATA

**Far Data Sp. z o.o.**

Lipowa 3, 30-702 Kraków • Tel. 12 255 99 99  
biuro@fardata.pl • www.fardata.pl

