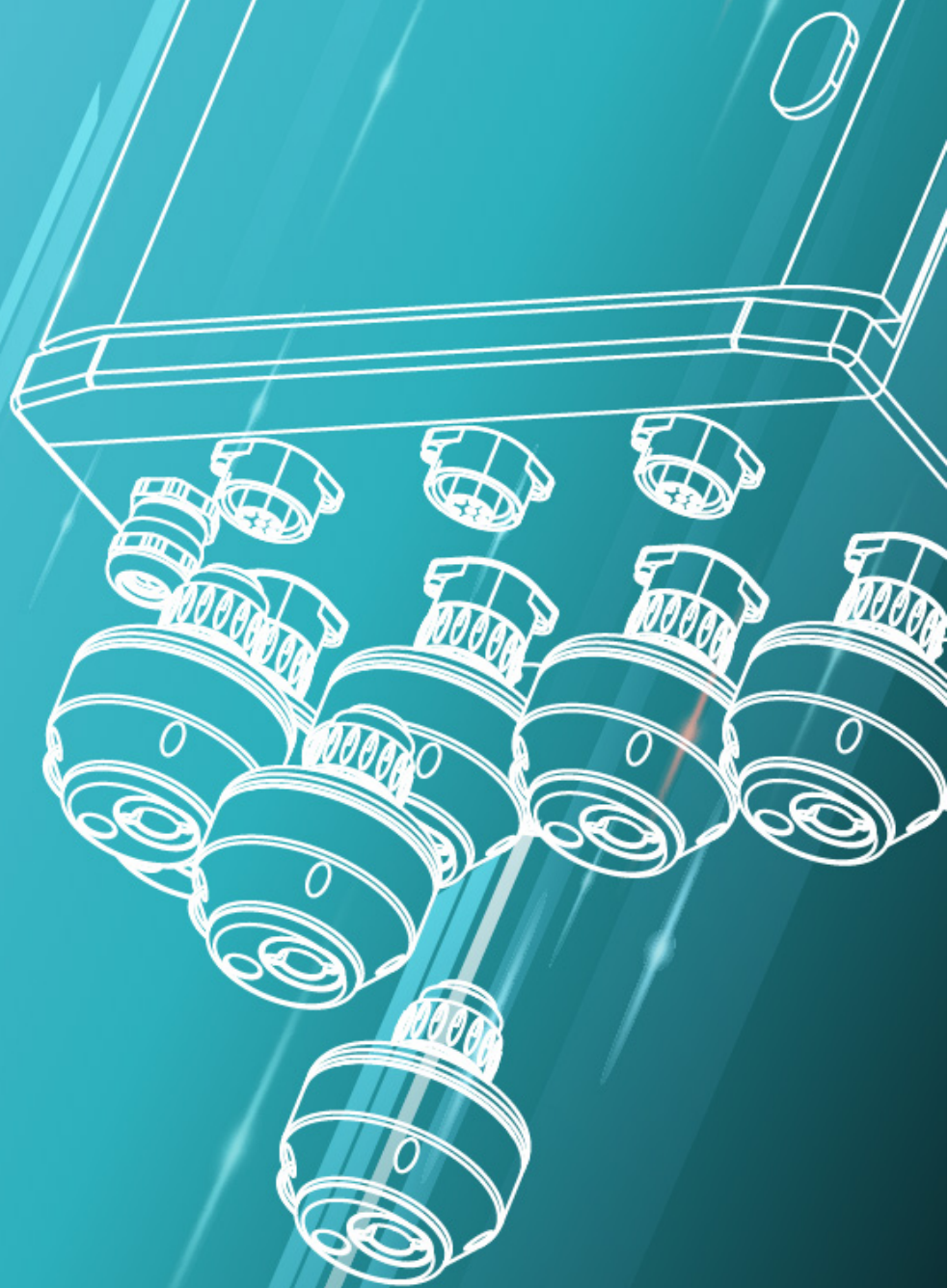


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AIR QUALITY

MONITORING STATION



SOLUTION DEDICATED TO OUTDOOR & HARSH ENVIRONMENTS



A MULTIFUNCTION SOLUTION

Dedicated to outdoor and harsh environments

Robust IP66 IK10 box

Membrane to protect gas sensors from dust
(can be replaced on site without tools)

Wide temperature range

Robust connectors

**Corrosion
resistant**

Environmental indices

Dew point
Freezing point
Windchill
Humidex
Air quality index

Weather information

Wind
Temperature
Atmospheric pressure
Relative humidity

Water quality

WiMo multiparameter
sonde
Remote via RS485 bus

Installation accessories

Mounting brackets (box and
PV) for installation on:
Poles, Fences, Walls

Fine Dust

PM1 / PM2.5 / PM10

Gases & Odours

Interchangeable sensors
on site
Automatic detection
Integrated compensation
in T°

Power supply

Solar autonomy
(PV & battery)
Backup mains power
(230VAC & battery)

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ostara MONITORING STATION

**POLE OR WALL
SUPPORT**

**AUTONOMOUS SOLAR
POWER SUPPLY**
or 230VAC

**WIRELESS
PROGRAMMING**
intuitive and easy-to-use
interface

**MODBUS INTERFACE FOR
WiMo SONDE**

**AUTOMATIC
RECOGNITION
OF SENSORS**

**IP66
ROBUST BOX**

**FTP/SMTP
TRANSMISSION**
2G / 3G / 4G

**POINT-TO-POINT
WI-FI**

**PARTICULATE MATTER,
TEMPERATURE,
HUMIDITY
AND PRESSURE**
integrated into the box

**INTERFACE FOR
ULTRASONIC
ANEMOMETER**

**RANGE OF SMART
& PLUG'N PLAY GAS SENSORS
T° & RH COMPENSATION**
easily installed
in any location!

EMBEDDED WEB INTERFACE



SPECIFICATIONS

PHYSICAL FEATURES	MECHANICAL FEATURES	TRANSMISSION	TEMPERATURE
Dimensions Width x Depth x Height 300 x 210 x 485 mm Waterproof IP66 Impact resistance IK10 Weight 5 kg (without battery) 9 kg (with battery)	Fibreglass-reinforced polyester Class II insulation Corrosion resistant Wall or pole fixing	Communication FTP / SMTP 2G / 3G / 4G LTE Local access Wi-Fi Embedded web interface for parameters setting and data visualisation	Operating temperature -20°C / +55°C Storage temperature 0°C / +40°C
			POWER SUPPLY
			Autonomous solution: PV + fixing support + lead battery External power supply solution: 230VAC + lead battery

SENSORS RANGE

INTEGRATED PARAMETERS	RANGE	ACCURACY	RESOLUTION
 Temperature	-20 à +55°C	±0.1°C	0.01°C
 Relative humidity	0 - 100% RH	±1.5 %RH	0.01 %RH
 Atmospheric pressure	300 / 1100 mbar	0.1 mbar @25°C	0.1 mbar
 PM Sensor	PM1 / PM2.5 / PM10 0 -1000 µg/m³	<5% 3-point calibration	0.001 µg/m³
 GNSS	lat./long./alt.	<4m (CEP-50)	0.000001°

EXTERNAL SENSORS	RANGE	ACCURACY	RESOLUTION
 Ultrasonic anemometer	0.12 - 40 m/s 0-359 °	0.12 m/s 1 °	0.1 m/s 1 °
 WiMo Multiparameter sonde	Sonde measuring water physicochemical parameters (temperature, pressure, conductivity, turbidity, pH, etc.). Remote control via RS485 Modbus cable.		

GAS(*)	STANDARD RANGE		COMPENSATION	ESTIMATED LIFETIME
 Carbon monoxide	10 ppm (0.001 ppm)	11 mg/m³	Temperature	3 years
 Hydrogen sulfide	10 ppm (0.1 ppm)	7 mg/m³	Temperature	3 years
 Ammonia	100 ppm (0.1 ppm)	69 mg/m³	Temperature	2 years
 Nitrogen dioxide	5 ppm (0.01 ppm)	9 mg/m³	Temperature	3 years
 Oxygen	25 % (0.01 %)	n/a	Temperature	2 years
 Ozone	5 ppm (0.001 ppm)	9 mg/m³	Temperature	3 years
 Sulfur dioxide	50 ppm (0.1 ppm)	130 mg/m³	Temperature	3 years
 Volatile organic compounds (VOCs)	10 ppm (0.01 ppm)	n/a	Temperature	3 years
 Odours	10 ppm (0.1 ppm)	n/a	Temperature	3 years

*Additional gases available on request (CH₄S, HCHO, HCN, H₂, PH₃, Br₂, ClO₂, Cl₂, F₂, HCl, HF)

CALCULATED PARAMETERS	SIGNIFICATION	RANGE
 Dew point	Condensation on surfaces with a temperature below the dew point	0 < Tr < 50 °C
 Freezing point	Formation of ice crystals on surfaces below freezing point	T < 0°C
 WindChill	Human body wind chill index	Air T < 10°C, Wind > 1m/s
 Humidex	Heat sensation index on the human body	
 Air quality index	Daily air quality index (France)	O3, SO2, NO2, PM10, PM2.5
 European air quality index	Hourly air quality Index (Europe)	O3, SO2, NO2, PM10, PM2.5

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ADAPTABLE SOLUTION

