

ostara
by nke

**AIR QUALITY
MONITORING STATION**



nke
INSTRUMENTATION

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 index

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

Fine Dust

PM1 / PM2.5 / PM10

Gases & Odours

Interchangeable sensors on site
Automatic detection
Integrated compensation in T° and RH

Power supply

Solar autonomy (PV & battery)
Mains powered (230VAC & battery)

Installation accessories

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

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**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, 3G/4G
TRANSMISSION**

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

**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)	Fibreglass-reinforced polyester Class II insulation Corrosion resistant Wall or pole fixing	Communication FTP 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

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
Dust Sensor	PM1 / PM2.5 / PM10 0 -1000 µg/m³	<5%	0.001 µg/m³
GNSS	Unknown	Unknown	Unknown

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.		

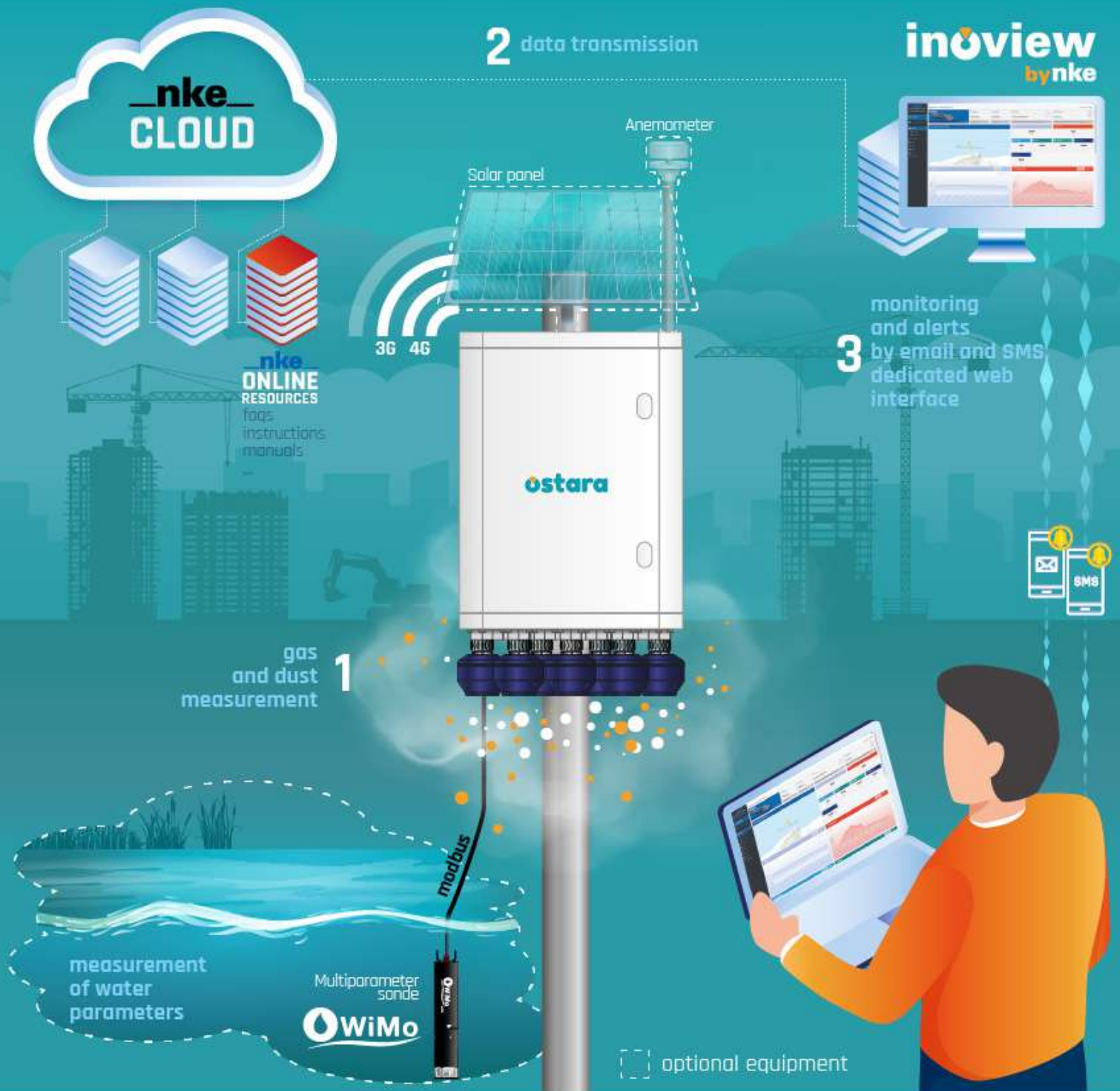
GAS(*)	STANDARD RANGE		COMPENSATION	ESTIMATED LIFETIME
Carbon monoxide	10 ppm (0.001 ppm)	11 mg/m³	Temperature	3 years
Hydrogen sulfide	50 ppm (0.1 ppm)	69 mg/m³	Temperature	3 years
Ammonia	100 ppm (0.1 ppm)	69 mg/m³	Temperature	2 years
Nitrogen dioxide	5 ppm (0.01 ppm)	9 mg/m³	Temperature	3 years
Oxygen	25 % (0.01 %)		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)		Temperature	3 years
Odours	10 ppm (0.1 ppm)		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	Air quality index based on the least favorable parameter	O3, SO2, NO2, PM10, PM2.5

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ADAPTABLE SOLUTION



SALES DEPARTMENT

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INNOVATION & COMMITMENT
nke is a member of French Fab and committed to the French industry of tomorrow.

