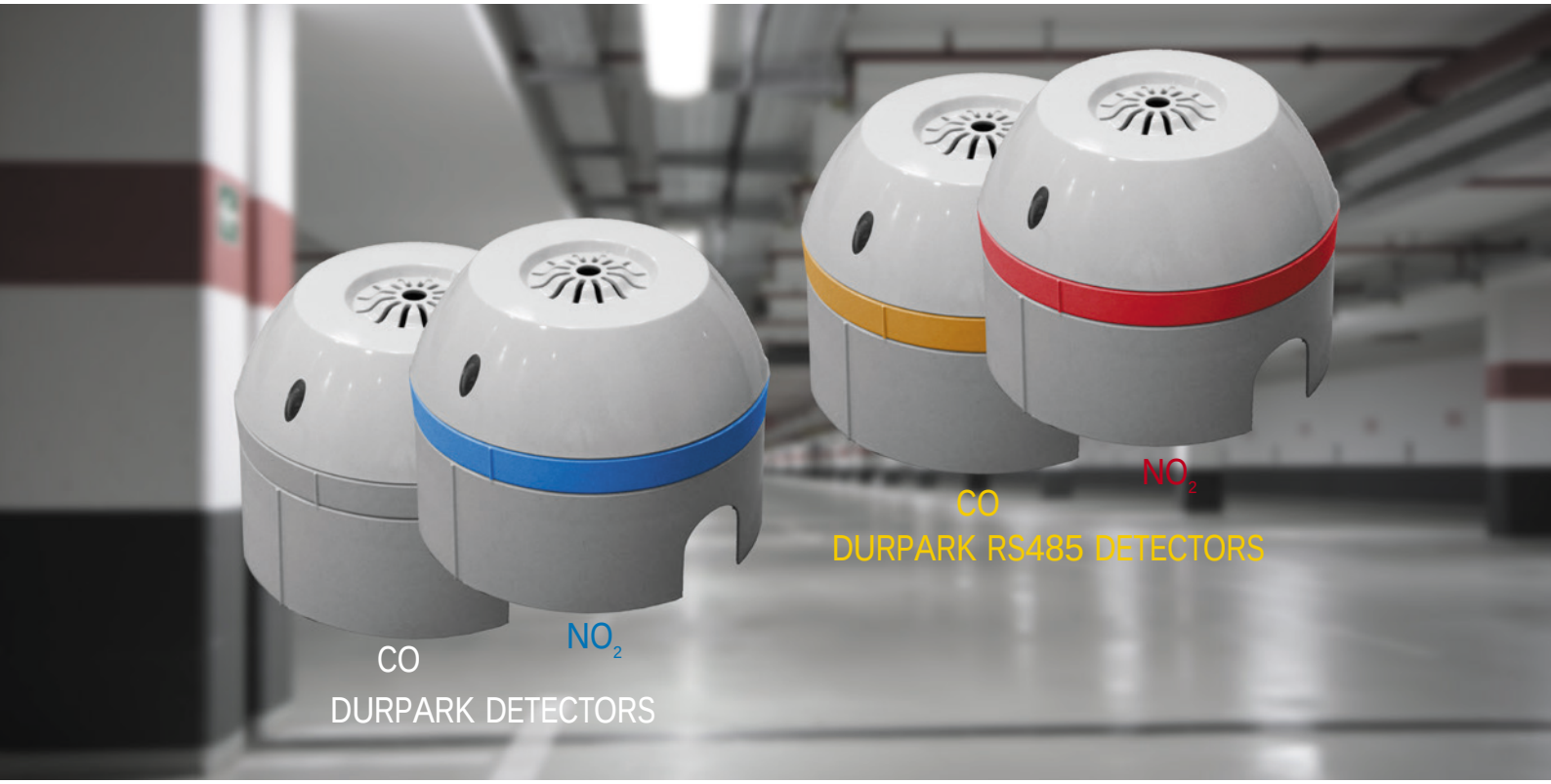
DURAN® electrónica

DURPARK CO AND NO_2 DETECTORS

DURPARK



DURPARK AND DURPARK RS485 DETECTORS

This new range of detectors is designed with a new type of electrochemical sensor with low cost and big performance that allows a useful life of up to 5 years with almost no maintenance.

Specially designed for use in car parks. Two models in two versions are available:

A model for CO detection with a range of 0-300 ppm and a resolution of +-1ppm, and a model for NO2 detection with a 0-20ppm range and a resolution of +-0.5 ppm, available with a 4-wire RS485 communications format and a 3-wire format, addressable in both cases.

In the detector, calibration and maintenance tasks have been simplified. Algorithms have been created for gain and zero automatic calibration through the use of software, as well as an algorithm and a special hardware that allows verifying sensor sensibility without the need to apply gas.

The composition of its electrolyte is respectful with the environment. Its structural shape cancels the risk of the electrolyte leaking. It does not use up active materials in its electrodes during operation, has a lower sensitivity to interfering gases, long life and good stability and precision.

This new range of detectors is compatible with the new DURPARK control panels in its 3-wire version and with DURGAS control panels in their DURPARK RS485 version with 4 wires.

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DURPARK & DURPARK Mini

CE

COMPLIANT WITH UNE23300-84 STANDARD

TECHNICAL CHARACTERISTICS OF THE CO/NO_2 DETECTOR, DURPARK & DURPARK RS485

Technology	Microprocessor and electrochemical sensor
Power supply tension	9V to 15V DC
Consumption	14mA (standby) 24mA (alarm)
Measuring range	From 0 to 300ppm CO, and 0-20ppm NO_2
Resolution	±1ppm CO, ±0.5ppm NO_2
Repeatability	±1% and 3% full scale respectively
Linearity	Linear throughout its full scale
Calibration gas and recommended concentration	Precise mixture 150ppm CO + O_2 150ml/min Precise mixture 10ppm NO_2 + N_2 1000ml/min
Sensor useful life	>5 years in normal working conditions for CO and 3 years for NO_2
Relative humidity	From 5% to 90% RH, without condensation
Atmospheric pressure	±10%
Operational temperature	-10°C to +60°C
T90 response time	60 s CO and <30 s NO_2
Parallel communication	3 wires, own addressable protocol (1 to 16) / 4 wires DURPARK RS485
Protection level	IP20
Materials	ABS
Weight (gr) and measurements, diameter/heigth (mm)	146, 90 X 42 without base / 90 X 74 with base
Installation height	1.8 / 2 m from floor CO and 1 m from floor NO_2
Approximate coverage	200 m^2 CO (following current standards), 100 m^2 NO_2

Standard conditions 20º ± 2ºC, 40% ± 10% HR

CROSS SENSITIVITY DATA

GAS	FORMULA	CONCENTRATION	CO DTR. RESPONSE	NO_2 DTR. RESPONSE
Ammonia	NH_3	25 ppm	0 ppm	0 ppm
Carbon Dioxide	CO_2	5000 ppm	0 ppm	0 ppm
Carbon Monoxide	CO	30 ppm	30 ppm	0 ppm
Chlorine	Cl_2	1.0 ppm	0 ppm	0 ppm
Unsaturated Hydrocarbons	-	1%	2 ppm	0 ppm
Hydrogen	H_2	100 ppm	20 ppm	0 ppm
Hydrogen Sulfide	H_2S	10 ppm	0 ppm	-7 ppm

The crossed sensitivity values are based on test on a small quantity of detectors. Detectors could show a different behavior depending on environmental conditions or production batch.