



SENTRY is an electro optical device to measure the opacity through air existing particles (suspended particles (SP), gas emissions, etc).

It uses frontal dispersion principle, receiving a sample of light in a 42° angle. The width of this angle allows it to detect big size particles.

SENTRY advantages against others:

1. It does not need calibration during the installation
2. External vibrations do not affect the sensor calibration.
3. Sentry uses the forward scatter principle. Other opacimeters use less effective technologies as back scatter.

CHARACTERISTICS

An integrated, one-piece housing design keeps all cabling internal to the sensor for the ultimate protection against the elements. The sensor housing is made from anodized aluminium and the enclosures are rugged, UV-resistant fiberglass rated to IP66.

The sensor uses a "look down" geometry to reduce window contamination.

Optionally, heaters are available to prevent freezing in cold environments.

All power and signal lines are protected with surge and EMI filtering to help guarantee uninterrupted service for the life of the sensor.

INSTALLATION and MAINTENANCE

Installation and maintenance are very simple (follow instructions in user manual).

It is not necessary to calibrate the equipment during installation as it comes calibrated from the factory.

It is recommended to carry out zero adjustment procedure every year.

If desired, calibration in the field may be carried out using a kit specific for that purpose, or by sending the equipment to DURÁN ELECTRÓNICA.

TECHNICAL CHARACTERISTICS

Opacity Range	0-15 x 10 ⁻³ m ⁻¹	Power supply	10-30 VDC
Precision	+/- 10% RMSE Operational +/- 1% Full Scale Calibration	Working temperature	-40° to 60° C
Time constant	60 s	Humidity	0-100%
Dispersion angle	42° nominal	Protection	IP66 (NEMA-4-X)
Source	850 nm LED	Weight (kg)	8
Output	isolated 4-20mA with option of diagnostic relay	Dimensions (cm)	88,9 x 29,2 x 30,5

**THIS DEVICE IS GUARANTEED AGAINST ANY MANUFACTURING DEFECT FOR 1 YEAR
FROM THE DATE OF PURCHASE**