





Climate change is the greatest challenge of our time. The burning of fossil fuels and industrialization releases NOx (nitrogen oxides) and is one of the main causes of increased greenhouse effect and global warming.

In turn, NOx helps form ground-level ozone $\{0_3\}$ which is a harmful air pollutant and a main ingredient in smog. These toxic gases impact human, animal, plant respiration, and contribute to forming acid rain that are harming sensitive ecosystems such as lakes and forests.

Aerys G tracks levels of $\rm O_3$, NO (nitric oxide), and NO $_2$ (nitrogen dioxide) and raises awareness about the quality of the air we breathe.

Because it is easy to install, maintain, and use, Aerys helps support urban planning, green infrastructure, and sustainable development within cities.

Dimensions

640 x 220 x 220 mm

Weight

10 kg

IK rating

IK08

Materials

fiberglass, ABS, hot-dip zinc coated steel (EN10346), galvanized low carbon steel (ISO 2081)

Operating temperature

-20°C to 50°C

Operating Humidity

(RH) 0-100%

Environment

C4/C5* (*on request)

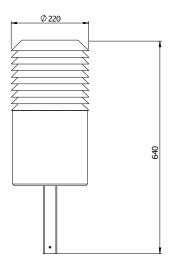
IP rating

IP45

Noise level

<30 dBA





Gas sensors

Sensors type Electrochemical sensors with low gas concentration detection

Monitored gases

Nitric oxide (NO) Nitrogen dioxide (NO₂) Ground-level ozone (O₃)

Zero drift (ppb equivalent change/year in lab air) 0 to 50 for NO, 0 to 20 for NO $_2$ and O $_3$

Max sensitivity drift (% change/year in lab air) 0 to -20 for NO, -20 to -40 for ${\rm NO_2}$ and ${\rm O_3}$

Calibration frequency

12 months from the installation date

Operating life 24 months or more from the installation date

Unit of measurement

ppb and ppm

Stabilization time when first plugged in 12 hours for NO, 2 hours for NO $_{\rm 2}$ and O $_{\rm 3}$

Li-ion battery pack

Total energy 320 Wh

Rated voltage

11.1 V

Max. voltage

12.6 V

Peak power 400 W

Continuous power

Over current protection

40 A

Over discharge protection

<3 V per cell

Short circuit protection

<100µs

Cell balancing

State of charge indicator



Environmental sensors

Atmospheric pressure sensor 700 ~ 1100 hPa

Humidity sensor 0 ~ 99 %RH ±2.0 %RH (20~80%RH)

Temperature sensor -40°C to 85°C ±2 °C

Internal server communication system

GSM band 850/900/1800/1900 MHz

Transmitting power Class 4 (2W) at 850/900MHz, Class 1 (1W) at 1800/1900MHz

GPS type 22 tracking (66 acquisition), GPS L1 C/A code

Accuracy GPS L1 C/A code