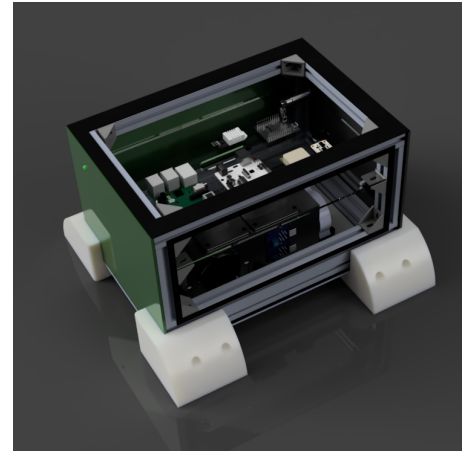




DIADEM HARAMBE 2021 v1.1

1 Overview

- Vehicle mount customization
- WLAN or optional GSM connection
- Internal data buffer
- IP 65
- One measurement per second
- Automatic calibration at proximity
- Maintenance interval 1 year



2 Sensor specification

	Range	Accuracy	Resolution
CO_2	0 – 5000ppm	$\pm(50 + 5\% \text{ of reading value})ppm$	-
CH_2O	0 – 6.25 $\frac{mg}{m^3}$	$\pm 0.03 \frac{mg}{m^3}$ or $\pm 20\%$ reading value (if concentr. > 0.2 $\frac{mg}{m^3}$)	-
O_3	0 – 10ppm	$\pm 0.1ppm$ or $\pm 20\%$ full range (if concentr. > 1ppm)	0.01ppm
CO	0 – 500ppm	$\pm 10\%$ reading value	0.1ppm
TVOC	0 – 3grades	-	-
NO_2	0.1 – 10ppm	-	0.05ppm
PM2.5	0 – 1000 $\frac{\mu g}{m^3}$	$\pm 15 \frac{\mu g}{m^3}$ or $\pm 15\%$ (if concentr. > 100 $\frac{\mu g}{m^3}$)	-
Temperature	-55 – 125°C	$\pm 0.5^\circ C$ (at -10 – 85°C)	-
Humidity	0 – 100%RH	$\pm 3\%RH$	-
GPS position	-	$\sim 2.5m$	-

3 Technical specification

	Value[Unit]
Power voltage	5 – 12[V]
Power consumption	$\sim 20[W]$
Dimensions	210[mm] * 297[mm] * 210[mm]
Weight	2500[g]
Operation temperature range	-20 – 60[°C]

