

BONOLO V5 Air Quality Monitor

Specification





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1 Measured parameters and units

The measured parameters and units used are given below

	Range	Resolution	Units
Temperature	-40 to 125	0.1	°C
Humidity	0 to 100	1	%
PM1, PM2.5 and PM10	0 to 500	1	µg/m ³
CO2 - optional	400 to 5000	10	ppm
NO2 - optional	0 to 5	0.001	ppm
SO2 - optional	0 to 5	0.001	ppm
CO - optional	0 to 100	0.1	ppm
O3 - optional	0 to 5	0.001	ppm

2 Communication

2.1 LTE CAT1

LTE Communication for uploads to an online server. Up to 5Mbps upload for uploads.

2.2 WIFI 2.4 GHz, 802.11b/g/n

WIFI communication protocol up to 54Mbps for uploads to an online server.

2.3 USB / UART

USB / UART communication for control of the device and local download of data.

3 Local Storage

3.1 SD Card – Minimum 8GB

Local storage of at least 8 giga-bytes on SD card memory

4 Online server / Dashboard

Data is available for viewing and download from a secure online dashboard.

5 Operating Conditions

5.1 Electrical specification - Internal battery

Table 1: Battery specification

	Minimum	Nominal	Maximum
Battery voltage (V)	3	3.7	4.2
Battery capacity (Wh)			88.8

5.2 Electrical specification - DC Power Supply for Charging

Table 2: DC power input specification

	Minimum	Nominal	Maximum
Input Voltage (V)		12	
Input Current (A)			1

5.3 Electrical specification - Solar Charging option

Table 3: Solar input specification

	Minimum	Nominal	Maximum
Input Voltage (V)		12	
Input Current (A)			0.5

5.4 Environmental conditions

Table 4: Environmental conditions

	Minimum	Nominal	Maximum
Ambient Temp (°C)	-10	25	65
Relative Hum (%)	10		95%

6 Mechanical specification

6.1 Dimensions

Length (mm)	173
Width (mm)	85
Thickness (mm)	52

6.2 Mass

Mass (g)	630
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7 Battery life

The battery life is dependent on the project's setup for sampling and online connectivity. For example, with five minute sampling intervals, and one upload a day the battery should last two to three months. Contact us for different set-ups.

8 Safety Warnings

- Disposal of a **battery** into fire or a hot oven, or mechanically crushing or cutting of a **battery** can result in an **explosion**;
- Leaving a **battery** in an extremely high temperature surrounding environment can result in an **explosion** or the leakage of flammable liquid or gas.