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**Air Quality Sensor Parts List Version 1.0**

| **Item** | **Qty** |  | **Comments** |
| --- | --- | --- | --- |
|  | 1 |  | Enclosure |
|  | 2 |  | Inner Vent Plug – provides support for Vent Pipes |
|  | 2 |  | Side Vent Filter – to be fitted to the bottom end of the vent pipe |
|  | 1 |  | Bottom drain  NOTE: this is not the same size as the Side Vent Filters. |
|  | 1 |  | Cable inlet plug for connecting the cable gland. |
|  | 1 |  | M16 4-8mm Cable gland for PSU cable entry  Threaded section should be 16mm diameter |
|  | 2 |  | Vent Pipe 21.5mm internal diameter. |
|  | 1 |  | BME280  humidity, pressure & temperature sensor.  Cable fitted (not shown) terminating in 6 way JST. |
|  | 1 |  | SDS011 particulate sensor |
|  | 1 |  | Heltec V2 (must be V2). Firmware is pre-installed but available on [github](https://github.com/ConnectedHumber/Air-Quality-Kit) .  Comes with an antenna.  Fits into socket on the PCB. Pins usually need to be soldered. |
|  | 1 |  | Heltec based controller PCB – assembled. |
|  | 1 |  | Sensor linking pipe. |
|  | 4 | M3x7 Poppstar Hard Drive Screws | for mounting carrier plate to enclosure. |
|  | 2 | clear poly pipe 25mm long x 8mm od | Connects SDS011 inlet to linking pipe and linking pipe to upper inlet vent. |
|  | 1 | 5mm nylon pcb standoffs F-F 3mm thread | fits between SDS011 and carrier plate |
|  | 2 | 5mm nylon standoff F-M 3mm thread | fits between SDS011 and carrier plate |
|  | 2 | 18mm nylon standoffs F-F 3mm thread | fits on top of SDS011 |
|  | 2 | 25mm nylon standoffs F-F 3mm thread | Carrier plate to PCB |
|  | 8 | 3mm x 5mm nylon screws | for securing the nylon standoffs |
|  | 1 |  | Clear Perspex Sensor Carrier.  2.4mm thick Perspex base plate – pre-drilled. |
|  | 1 |  | Antenna Mount |
|  | 1 |  | 2 way terminal block 3A (small) |
|  | 1 | SDS connector JST 6pin to JST 4 pin 2.54mm | Connects SDS to MCU PCB |
|  | 1 | JST-2 pin with fly leads | Connects MCU 5V to the 2 way terminal block. |
|  | 2 |  | Optional enclosure mounting plates.  These will be cemented to the enclosure using PVC weld glue and will ensure no rain water can penetrate the rear of the enclosure. |

Total cost of parts for the kit: £60.00

Cost of visualisation connection £20.00 per annum