

5 P14 4 Starkvind

Wednesday, August 17, 2022 8:17 PM



CADR	232 cfm / 394 m ³ h
dBA	41.6 - 35.0 (ambient) = 40.5
Dimensions	19 1/2" x 19 1/2" x 11 1/2" 495 mm x 495 mm x 296 mm
Est total cost	\$130.89

Purpose of this build was to use all 5 fans in the P14 5-pack and to go as low-cost as possible with fans + power supply. PWM PST version more expensive but they daisy chain, one less connector to purchase & assembly is easier.

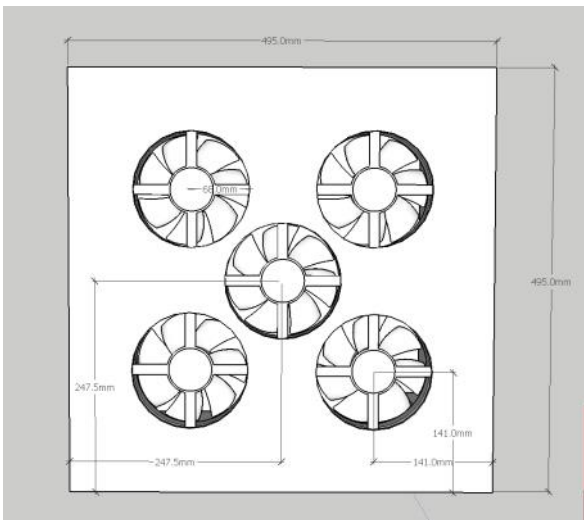
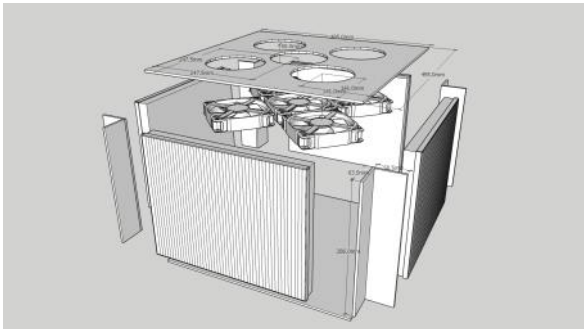
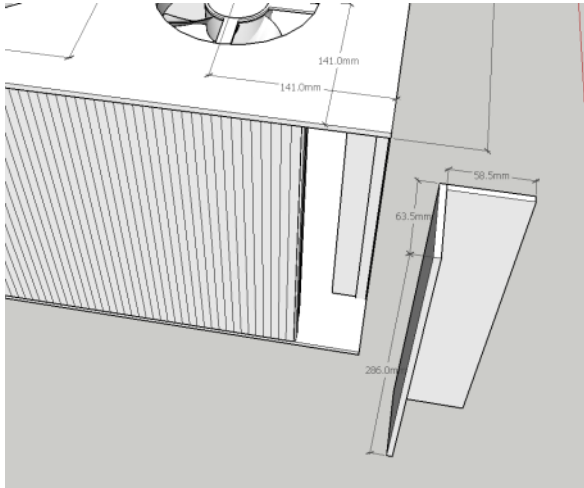
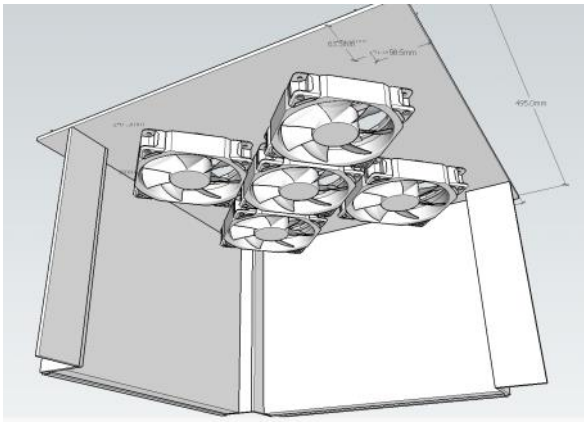


Bill of Materials

- 5-pack Arctic P14 PWM PST (\$45.99)
- 4 Ikea Starkvind filters (\$60)
- Coolerguys 12V fan power supply (\$8)
- 2 sheets 3/16" thick 20" x 30" foam board (\$6.80)
- About 5 mini sticks of Hot glue (\$0.52)
- 20x 45mm M4 bolts (\$6.66)
- 20x M4 nuts (\$1.22)
- 20x M4 washers (\$1.70)

Total: \$130.89

Drawings with important measurements:

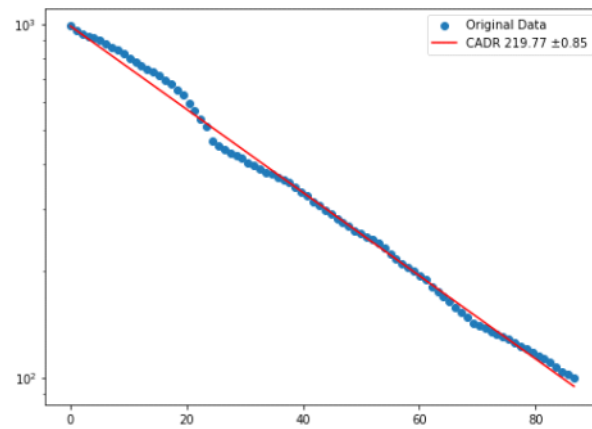
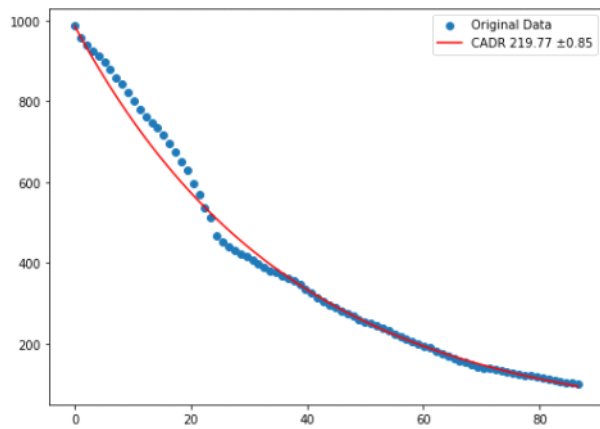


CADR measurement details for those interested

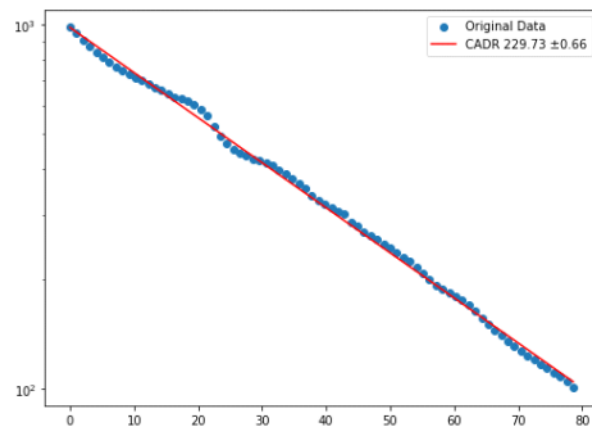
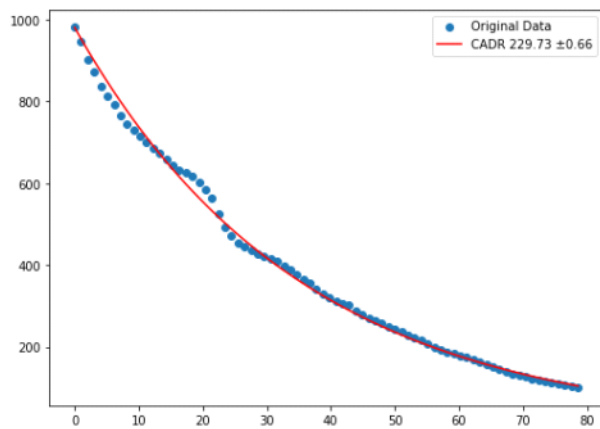
5 Arctic P14 4 Starkvind				
	CADR (cfm / m³h)			
Sensor	Trial 1	Trial 2	Trial 3	Average
SDS011	234.18 / 397.87	230.47 / 391.57	231.71 / 393.67	232.12 / 394.37
Sensirion SP530	219.77 / 373.39	229.73 / 390.31	227.13 / 385.89	225.54 / 383.20

In CADR measurement trials Sensirion SP530 was subject to waves as seen with PMS 5003, though not as bad. SDS011 has no waves ! Does it have EMI shielding?

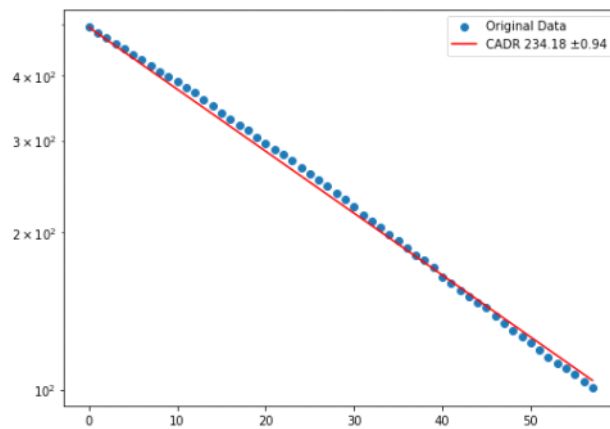
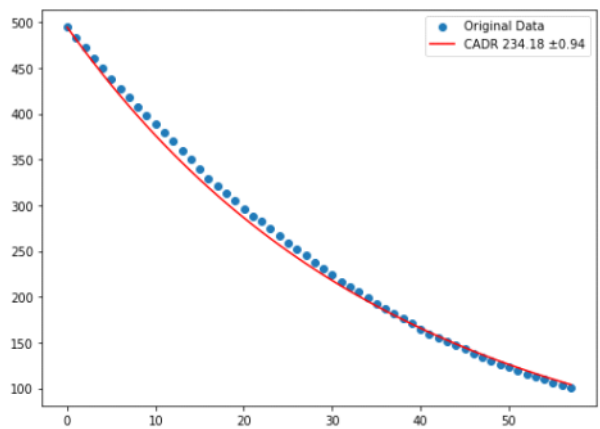
Sensirion SP530 Trial 1



Sensirion SP530 Trial 2



SDS011 Trial 1



SDS011 Trial 2

