

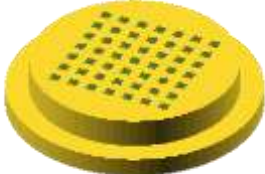
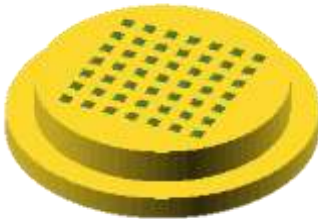




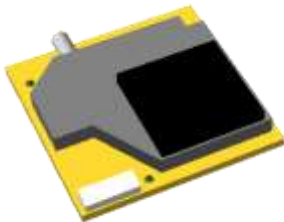




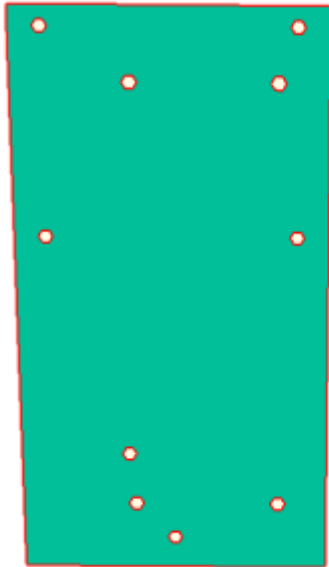
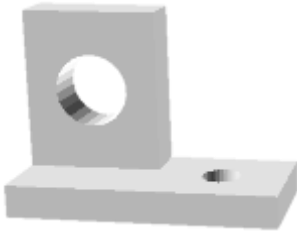

Heltec Kit Parts List (work in progress)

NOTE: a number of parts use PVC cement to fix the 3D printed parts to the enclosure. Use a small artists' paint brush to smear the glue otherwise you may get runs which require wiping quickly before the glue sets.

Item	Qty		Comments
	1		Enclosure available from Ebay
	2		Inner Vent Plug – provides support for Vent Pipes
	2		Side Vent Filter – to be fitted to the bottom end of the vent pipe NOTE: this is not the same size as the bottom drain.
	1		Bottom drain NOTE: this is not the same size as the Side Vent Filters.

Item	Qty		Comments
	1		Cable inlet plug for connecting the cable gland.
	1		M16 4-8mm Cable gland for PSU cable entry Threaded section should be 16mm dia. Screws into. Available from Amazon
	2		Vent Pipe 21.5mm internal dia. Available in B&Q in packs of 3 for £1.98 and various other internet vendors.
	1		BME280 humidity, pressure & temperature sensor. Cable fitted (not shown) terminating in 6 way JST.
	1		SDS011 particulate sensor available from Amazon and Ebay
	1		Heltec V2 (must be V2). firmware is pre-installed but available on github . Available from Amazon or Ebay or Aliexpress. Comes with an antenna. Fits into socket on the PCB. Pins usually need to be soldered.

Item	Qty		Comments
	1		Heltec based controller PCB – assembled.
	1		Sensor linking pipe.
	4	M3x7 Poppstar Hard Drive Screws	for mounting carrier plate to enclosure. Available from Amazon .
	2	clear poly pipe 25mm long x 8mm od	connects SDS011 to linking pipe and linking pipe to upper inlet vent. Available in B&Q
	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

Item	Qty		Comments
	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	connect SDS to MCU PCB
	1	JST-2 pin with fly leads	connect MCU 5V to the 2 way terminal block.