

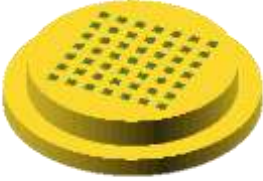
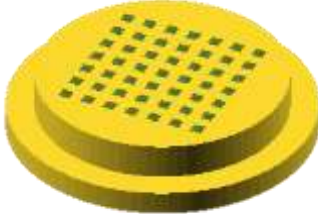




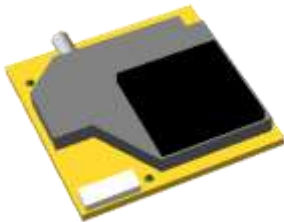





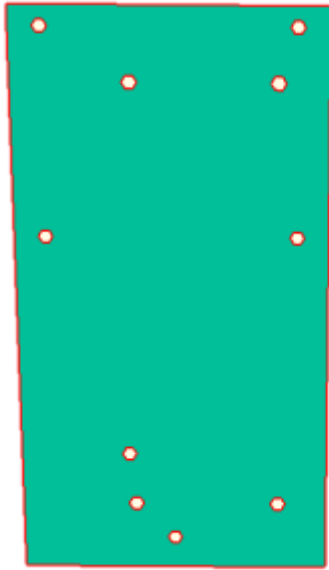
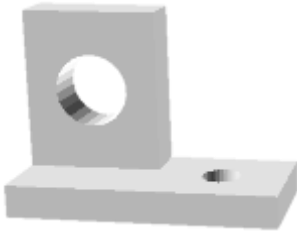

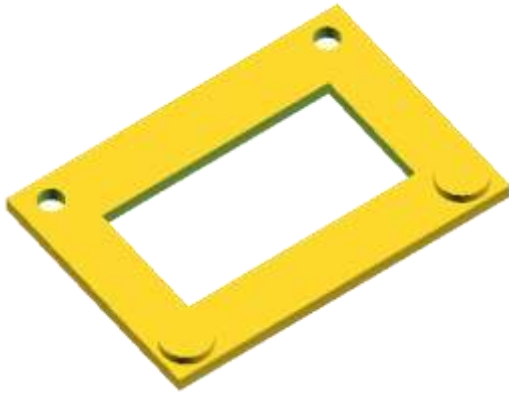
## Heltec Kit Parts List (work in progress)

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 <a href="#">Ebay</a>
	2		Inner Vent Plug – provides support for Vent Pipes  STL in 3D parts folder
	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.  STL in 3D parts folder
	1		Bottom drain  NOTE: this is not the same size as the Side Vent Filters.  STL in 3D parts folder

Item	Qty		Comments
	1		<p>Cable inlet plug for connecting the cable gland.</p> <p>STL in 3D parts folder</p>
	1		<p>M16 4-8mm Cable gland for PSU cable entry</p> <p>Threaded section should be 16mm dia. Screws into.</p> <p>Available from <a href="#">Amazon</a></p>
	2		<p>Vent Pipe 21.5mm internal dia.</p> <p>Available in B&amp;Q in packs of 3 for £1.98 and various other internet vendors.</p>
	1		<p>BME280 humidity, pressure &amp; temperature sensor.</p> <p>Cable fitted (not shown) terminating in 6 way JST.</p> <p>Available on Ebay/Amazon</p>
	1		<p>SDS011 particulate sensor</p> <p>Available from Amazon and Ebay and Aliexpress (if you can wait.)</p>
	1		<p>Heltec V2 (must be V2). Firmware is pre-installed but available on <a href="#">github</a>.</p> <p>Available from Amazon or Ebay or Aliexpress.</p> <p>Comes with an antenna.</p> <p>Fits into socket on the PCB. Pins</p>

Item	Qty		Comments
			usually need to be soldered.
	1		Heltec based controller PCB – assembled.
	1		Sensor linking pipe.  STL in 3D parts folder
	4	M3x7 Poppstar Hard Drive Screws	for mounting carrier plate to enclosure.  Available from <a href="#">Amazon</a> .
	2	clear poly pipe 25mm long x 8mm od	Connects SDS011 inlet 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		<p>Clear Perspex Sensor Carrier.</p> <p>2.4mm thick Perspex base plate – pre-drilled.</p>
	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		<p>Optional enclosure mounting plates.</p> <p>These will be cemented to the enclosure using PVC weld glue and will ensure no rain water can penetrate the rear of the enclosure.</p>

