

Component	Material	Manufacturer/PN For Reference	Coating	Quantity
Structure				
Side Bracket	Aluminium	BWSI Staff		4
5-hole Side Bracket (rect. cut outs)	Acrylic	BWSI Staff		4
5-hole Side Bracket (circ. cut out)	Acrylic	BWSI Staff		4
Top Panel	Acrylic	BWSI Staff		1
Bottom Panel	Acrylic	BWSI Staff		1
9-hole Panel	Acrylic	BWSI Staff		3
9-hole Panel (T-shape cut out)	Acrylic	BWSI Staff		1
1-inch Stand	Nylon	BWSI Staff		4
0.5-inch Stand	Nylon	BWSI Staff		4
Square Braket	Aluminium	BWSI Staff		8
Bus Components				
Raspberry Pi	PCB	Raspberry Pi		1
IMU	PCB	Adafruit		1
T-Core Power Bank		T-Core		1
Solar Panel	Solar Cells			1
Payloads				
Raspberry Pi Camera V2	PBC/Camera	Raspberry Pi		1
Camera Case	Polycarbonate	Adafruit		1
Fasteners				
Velcro	Velcro			6
Screws and Nuts	Steel			60
Harnessing	Wires			6
Staking/Coating				

Total

Total Mass Allowed

Mass Remaining

Mass Remaining %

Component	Mass (g)	Total Comp Mass (g)	% Contingency	Total + Contingency (g)	Subsystem Mass (g)
Structure		168.1			178.185
Side Bracket	7.5	30	10	33	
5-hole Side Bracket (rect. cut outs)	1.89	7.56	5	7.938	
5-hole Side Bracket (circ. cut out)	1.96	7.84	5	8.232	
Top Panel	29.9	29.9	5	31.395	
Bottom Panel	30.46	30.46	5	31.983	
9-hole Panel	13.73	41.19	5	43.2495	
9-hole Panel (T-shape cut out)	13.31	13.31	5	13.9755	
1-inch Stand	0.84	3.36	5	3.528	
0.5-inch Stand	0.22	0.88	5	0.924	
Square Braket	0.45	3.6	10	3.96	
Bus Components		284.54			314.7675
Raspberry Pi	96.67	96.67	20	116.004	
IMU	2.1	2.1	5	2.205	
T-Core Power Bank	175.77	175.77	5	184.5585	
Solar Panel	10	10	20	12	
Payloads		10.5			11.025
Raspberry Pi Camera V2	3	3	5	3.15	
Camera Case	7.5	7.5	5	7.875	
Fasteners			15	13.8	13.8
Velcro	0.2	1.2	15	1.38	
Screws and Nuts	0.2	12	15	13.8	
Harnessing	0.2	1.2	15	1.38	1.38
Staking/Coating				0	0

Total	476.34	519.1575
Total Mass Allowed	1000	1000
Mass Remaining	523.66	480.8425
Mass Remaining %	52.366	48.08425

Component	Reference	NOTES
Structure		
Side Bracket	CAD Model	
5-hole Side Bracket (rect. cut outs)	CAD Model	
5-hole Side Bracket (circ. cut out)	CAD Model	
Top Panel	CAD Model	
Bottom Panel	CAD Model	
9-hole Panel	CAD Model	
9-hole Panel (T-shape cut out)	CAD Model	
1-inch Stand	CAD Model	
0.5-inch Stand	CAD Model	
Square Braket	CAD Model	
Bus Components		
Raspberry Pi	Measured Mass	
IMU	Product Description	
T-Core Power Bank	Product Description	
Solar Panel		
Payloads		
Raspberry Pi Camera V2	Product Description	
Camera Case	Product Description	
Fasteners		
Velcro	Estimate	Haven't been able to measure accurately
Screws and Nuts	Estimate	Haven't been able to measure accurately
Harnessing		
Staking/Coating		

Total

Total Mass Allowed

Mass Remaining

Mass Remaining %