

ALUMINIUM PROFILES							MISCELLANEOUS OFF-SHELF COMPONENTS							FUNCTIONAL 3D PRINTED COMPONENTS							AESTHETIC 3D PRINTED COMPONENTS										
Part Name	Image	Part Number	Quantity	Price per unit inc. VAT (£)	Purchase Link	Comments	Part Name	Image	Part Number	Quantity	Price per unit inc. VAT (£)	Purchase Link	Comments	Part Name	Image	Part Number	Quantity	Weight inc. supports (g)	Filament Used	Print Setting Profile	Print Time inc. autocalibration (h)	Comments	Part Name	Image	Part Number	Quantity	Weight (g)	Filament Used	Print Setting Profile	Print Time inc. autocalibration (h)	Comments
BR Aluminium Profile (20x30mm) (BEAK)		(1A)	2	7.43		Hole drilling specs: M6/M8 D8 (hole centre 260/250mm from profile end) Hole drilling specs: M6/M8 D8 (hole centre 260mm from profile end) Hole drilling specs: M6/M8 D8 (hole centre 260mm from profile end) Hole drilling specs: M6/M8 D8 (hole centre 260mm from profile end) Hole drilling specs: M6/M8 D8 (hole centre 260mm from profile end) Hole drilling specs: M6/M8 D8 (hole centre 260mm from profile end) Hole drilling specs: M6/M8 D8 (hole centre 260mm from profile end) Hole drilling specs: M6/M8 D8 (hole centre 260mm from profile end) Hole drilling specs: M6/M8 D8 (hole centre 260mm from profile end)	Silicone Tubing (UV pump to main tank)		(15)	1	6.59 each TWO REQUIRED (13.18)	https://www.amazon.co.uk/bp-80819M18V7Hef-ppg-y02ov-at-3-fel-asm-18f0e		Feet 1		(1P)	2	31.03	Wood PLA	Strong Standard	1h20m		Profile Cover (front, bot, left)		(1P)	1	46.28	Wood PLA	Strong Standard	1h44m	
BR Aluminium Profile (20x30mm) (FRONT)		(3A)	2	7.43			Silicone Tubing (main pump to main tank)		(25)	1	6.59 each TWO REQUIRED (13.18)	https://www.amazon.co.uk/bp-80819M18V7Hef-ppg-y02ov-at-3-fel-asm-18f0e		Feet 2		(2P)	2	31.03	Wood PLA	Strong Standard	1h20m		Profile Cover (front, bot, right)		(2P)	1	46.28	Wood PLA	Strong Standard	1h44m	
BR Aluminium Profile (20x30mm)		(3A)	2	5.33			Silicone Tubing (main pump to mist tray)		(25)	1	6.59 each TWO REQUIRED (13.18)	https://www.amazon.co.uk/bp-80819M18V7Hef-ppg-y02ov-at-3-fel-asm-18f0e		Nutrient Drawer Frame		(3P)	1	249.44	PETG HF	Standard	8h43m		Profile Cover (top, rightside)		(3P)	1	34.29	Wood PLA	Strong Standard	1h48m	
BR Aluminium Profile (20x45mm)		(4A)	2	3.88			Epoxy		(45)	1	13.65	https://www.amazon.co.uk/bp-80819M18V7Hef-ppg-y02ov-at-3-fel-asm-18f0e		Pump Box		(4P)	1	377.5	PETG HF	Standard	14h12m		Profile Cover (top, leftside)		(4P)	1	34.29	Wood PLA	Strong Standard	1h48m	
BR Aluminium Profile (20x35mm)		(5A)	2	3.56			Silicone Glue		(55)	1	8.99	https://www.amazon.co.uk/bp-80819M18V7Hef-ppg-y02ov-at-3-fel-asm-18f0e		UV Tank		(5P)	1	210.19	PETG Translucent	Translucent	10h20m	Use Translucent Optimal for better cleanliness	Right side Varsity WHTE		(5P)	1	167.59	PETG HF	Standard	4h14m	
Aluminium Profile (20x35mm) (TOP)		(6A)	2	3.56			Waterproof Cable Gland		(65)	7	7.99	https://www.amazon.co.uk/bp-80819M18V7Hef-ppg-y02ov-at-3-fel-asm-18f0e	Only purchase 1 unit	Bus		(6P)	1	144.83	PETG HF	Standard	4h10m		Right side Varsity WHTE		(6P)	1	88.84	Wood PLA	Standard	2h40m	
BR Aluminium Profile (20x40mm)		(7A)	4	3.06			Electronic Case Gasket		(75)	1	7.77 each TWO REQUIRED (15.54)	https://www.amazon.co.uk/bp-80819M18V7Hef-ppg-y02ov-at-3-fel-asm-18f0e		Electronic Case		(7P)	1	537.29	PETG HF	Strong Standard	15h23min		Profile Cover (top, frontside)		(7P)	2	39.71	Wood PLA	Strong Standard	1h42m	
BR Aluminium Profile (20x40mm) (BOT)		(8A)	3	3.06			Valve Gasket		(85)	1	7.77 each TWO REQUIRED (15.54)	https://www.amazon.co.uk/bp-80819M18V7Hef-ppg-y02ov-at-3-fel-asm-18f0e	All gaskets were laser cut from their sheets of rubber. See attached DXF files for geometry.	Tank Rail (left)		(8P)	1	13.96	Wood PLA	Standard	31m26s		Profile Cover (back, leftside, bottom)		(8P)	1	12.09	Wood PLA	Strong Standard	50m7s	
BR Aluminium Profile (20x15mm)		(9A)	2	2.47			Filter Drawer Gasket		(95)	1	7.77 each TWO REQUIRED (15.54)	https://www.amazon.co.uk/bp-80819M18V7Hef-ppg-y02ov-at-3-fel-asm-18f0e		Tank Rail (right)		(9P)	1	12.75	Wood PLA	Standard	20m33s		Profile Cover (back, leftside, top)		(9P)	1	22.51	Wood PLA	Strong Standard	1h21m	
TOTAL COST = £88.76							FASTENERS																								
Part Name	Image	Part Number	Quantity	Price per unit inc. VAT (£)	Purchase Link	Comments	Part Name	Image	Part Number	Quantity	Price per unit inc. VAT (£)	Purchase Link	Comments	Part Name	Image	Part Number	Quantity	Weight inc. supports (g)	Filament Used	Print Setting Profile	Print Time inc. autocalibration (h)	Comments	Part Name	Image	Part Number	Quantity	Weight (g)	Filament Used	Print Setting Profile	Print Time inc. autocalibration (h)	Comments
S6 x 16 T25 Core Screw		(1F)	34	0.43	https://www.amazon.co.uk/bp-80819M18V7Hef-ppg-y02ov-at-3-fel-asm-18f0e	Listed supplier sells in packs of 10	2.5x55mm Stainless Steel Rod		(125)	2	7.58	https://www.amazon.co.uk/bp-80819M18V7Hef-ppg-y02ov-at-3-fel-asm-18f0e	Only purchase 1 unit	Latch Holder (right)		(11P)	1	4.79	PETG HF	Standard	25m31s		Profile Cover (back, rightside, bottom)		(11P)	1	12.09	Wood PLA	Strong Standard	50m7s	
M4 T-nut (8mm slot)		(2F)	53	0.4	https://www.amazon.co.uk/bp-80819M18V7Hef-ppg-y02ov-at-3-fel-asm-18f0e	Listed supplier sells in packs of 10	2.5x18mm Stainless Steel Rod		(135)	1	7.58	https://www.amazon.co.uk/bp-80819M18V7Hef-ppg-y02ov-at-3-fel-asm-18f0e	Only purchase 1 unit	Latch Handle		(12P)	1	54.88	Wood PLA	Standard	1h33m		Profile Cover (back, rightside, top)		(12P)	1	22.51	Wood PLA	Strong Standard	1h21m	
20x20 3 Way Cubic Connector & Filings		(3F)	4	6.52	https://www.amazon.co.uk/bp-80819M18V7Hef-ppg-y02ov-at-3-fel-asm-18f0e		2.5x25mm Stainless Steel Rod		(145)	3	7.58	https://www.amazon.co.uk/bp-80819M18V7Hef-ppg-y02ov-at-3-fel-asm-18f0e	Only purchase 1 unit	Latch Lifting Bar		(13P)	1	1.41	PETG HF	Standard	13m56s		Profile Cover (front, rightside)		(13P)	1	47.52	Wood PLA	Strong Standard	2h5m	
30 x 20 Bracket		(4F)	4	0.86	https://www.amazon.co.uk/bp-80819M18V7Hef-ppg-y02ov-at-3-fel-asm-18f0e		Mounting Rim Profile (4x25mm)		(155)	4	4.52 each TWO REQUIRED (9.04)	https://www.amazon.co.uk/bp-80819M18V7Hef-ppg-y02ov-at-3-fel-asm-18f0e		Actuator		(14P)	1	11.93	Wood PLA	Standard	33m9s		Ventilation Cover (front)		(14P)	1	23.69	Wood PLA	Standard	49m28s	
Brass Insert (M2x2x3.2)		(5F)	2			Purchased as part of a selection box. Not all inserts were used in this project.	Mounting Rim Profile (6x45mm)		(165)	4	4.52 each TWO REQUIRED (9.04)	https://www.amazon.co.uk/bp-80819M18V7Hef-ppg-y02ov-at-3-fel-asm-18f0e		Wall (rightside)		(15P)	1	210.77	PETG HF	Standard	4h51m	Must use full build plate. See LINK	Electronic Cover (front)		(15P)	1	47.91	Wood PLA	Standard	1h38m	
Brass Insert (M2x2x3.2)		(6F)	2				PLCD16004 Shut-off Valve		(175)	1	30.06	https://uk.rs-online.com/web/p/valves/16004		Ventilation Shaft (right)		(16P)	1	336.78	PETG HF	Standard	10h22m	Use Adaptive Layer Height for improved surface smoothness	Nutrient Drawer cover		(16P)	2	6.94	Wood PLA	Standard	17m15s	
Brass Insert (M2x2x3.2)		(7F)	4				PLCD20004 Shut-off Valve		(185)	1	21.01	https://uk.rs-online.com/web/p/valves/20004		Nutrient Drawer		(18P)	2	53.75	PETG HF	Standard	1h18m		Electronic holder (right)		(18P)	1	7.38	Wood PLA	Standard	19m19s	
Brass Insert (M2x2x3.2)		(8F)	20	15.99			Clear PETG Sheet (SIDE)		(195)	2	20.62	https://www.amazon.co.uk/bp-80819M18V7Hef-ppg-y02ov-at-3-fel-asm-18f0e	Only purchase 1 unit, size 600 x 862mm	Main Water Tank		(19P)	1	1.482.15	PETG HF	Strong Standard	1612h11m		Leftside Cover		(19P)	1	305.77	Wood PLA	Standard	2h38m	
Brass Insert (M2x2x3.2)		(9F)	2				Clear PETG Sheet (BACK)		(205)	1	20.62	https://www.amazon.co.uk/bp-80819M18V7Hef-ppg-y02ov-at-3-fel-asm-18f0e	Only purchase 1 unit, size 600 x 862mm	Main Tank Water Filter		(20P)	1	1.45	PETG HF	Standard	13m33s		Water Tank Cover		(20P)	1	142.67	Wood PLA	Standard	1h11m	
Brass Insert (M4x4x4)		(10F)	2				Clear PETG Sheet (DOORS)		(235)	1	20.62	https://www.amazon.co.uk/bp-80819M18V7Hef-ppg-y02ov-at-3-fel-asm-18f0e	Only purchase 1 unit	Ventilation Lid (bottom, left)		(21P)	1	71.13	Wood PLA	Standard	1h47m		Door Cover (left)		(21P)	2	52.96	PLA Matte	Strong Standard	2h38m	
Brass Insert (M4x4x4)		(11F)	12				Plastic Hinge (20mm)		(225)	2	1.52	https://www.amazon.co.uk/bp-80819M18V7Hef-ppg-y02ov-at-3-fel-asm-18f0e		Ventilation Lid (bottom, right)		(22P)	1	71.75	Wood PLA	Standard	1h47m		Door Cover (right, bottom)		(22P)	1	52.05	PLA Matte	Strong Standard	2h35m	
Brass Insert (M4x10x4)		(12F)	14				Door Magnet (passive)		(235)	1	6.99	https://www.amazon.co.uk/bp-80819M18V7Hef-ppg-y02ov-at-3-fel-asm-18f0e	Only purchase 1 unit	Magnet holder (passive)		(23P)	1	1.71	PLA Matte	Standard	9m46s		Door Cover (right, top)		(23P)	1	52.05	PLA Matte	Strong Standard	2h35m	
Brass Insert (M5x8x7)		(13F)	12				Door Magnet (active)		(245)	1	6.99	https://www.amazon.co.uk/bp-80819M18V7Hef-ppg-y02ov-at-3-fel-asm-18f0e	Only purchase 1 unit	Filter Box		(24P)	1	311.87	PETG Translucent	Translucent	10h28m	Use Translucent Optimal for better cleanliness	Ceiling Cover (bottom, left)		(24P)	1	39.16	Wood PLA	Standard	1h4m	
Brass Insert (M6x4x4)		(14F)	5				Mesh Filter (28x76mm)		(255)	1	11.99	https://www.amazon.co.uk/bp-80819M18V7Hef-ppg-y02ov-at-3-fel-asm-18f0e		Fan Holder		(25P)	1	62.29	PETG HF	Standard	3h2m		Ceiling Cover (bottom, right)		(25P)	1	39.16	Wood PLA	Standard	1h4m	
M2.5x4 Pan Head Screw		(15F)	4	0.03			Aquarium Springs Filter (180x15mm, 20ppf)		(265)	1	7.99	https://www.amazon.co.uk/bp-80819M18V7Hef-ppg-y02ov-at-3-fel-asm-18f0e		Mist (left, 0)		(26P)	1	114.73	PETG HF	Standard	4h5m	Use Adaptive Layer Height for improved surface smoothness	Mist Cover (bottom, left)		(26P)	1	57.58	Wood PLA	Standard	1h25m	
TOTAL COST = £177.24							ELECTRONIC COMPONENTS																								
M3x4 Pan Head Screw		(16F)	14	0.04		Purchased at local hardware store. McMaster-Carr are an option for online purchase.	Whadda WP442 280mahres DC Pump		1E	2	13.77	https://www.whadda.com/whadda-wp442		Mist (right, 0)		(27P)	1	59.72	PETG HF	Standard	2h2m	Use Adaptive Layer Height for improved surface smoothness	Mist Cover (bottom, right)		(27P)	1	57.58	Wood PLA	Standard	1h25m	Orientation in 3mf file is incorrect. Print flat face down
M3x8 Countersunk Screw		(17F)	14	0.05			Sensation SH405 (temp & humidity) sensor		2E	1	34.39	https://uk.rs-online.com/web/p/sensors/405		Mist (right, 1)		(28P)	1	152.4	PETG HF	Standard	4h32m		Mist Cover (midship, left)		(28P)	2	58.02	Wood PLA	Standard	1h26m	
M3x10 Pan Head Screw		(18F)	12	0.05			VLS3LX Top Sensor + Breakout Board		3E	2	16.5	https://shop.pimont.com/product/vls3lx-top-sensor-breakout-board-12024972-9001		Mist (right, 2)		(31P)	1	176.27	PETG HF	Standard	5h20m		Mist Cover (midship, right)		(29P)	2	58.02	Wood PLA	Standard	1h26m	
M4x8 Count																															