

Subsystem	Description	Supplier	No. of units	Cost per unit (\$AUD)	Total Cost (\$AUD)
PCB	4-layer Bare Rigid Printed Circuit Board	JLCPCB	2	26.71	53.42
	Rigid Populated printed circuit board		2	129.09	258.19
	Shipping		1	38.61	38.61
System Housing	PLA 3D Printer Filament	Jaycar	1 (150g)	30/kg	4.50
Breadboard Prototyping	Hobby Wire 6pcs => 6clrs 7/0.16	Altronics	1	17.95	17.95
	Board Vero .1" Pitch 160 x 100mm	Altronics	1	7.95	7.95
	TL071 Op-amp L/N JFET	Altronics	2	2.00	4.00
	Resistor 0.5W metal-film 1% (4k7) mini pack 8	Jaycar	1	0.85	0.85
	Resistor 0.5W metal-film 1% (240Ω) mini pack 8	Jaycar	1	0.85	0.85
	Resistor 0.5W metal-film 1% (5k6) mini pack 8	Jaycar	1	0.85	0.85
	Ceramic NP0 47 pF 50 V ±0.25 pF, 5 mm pitch (pk2)	Jaycar	1	0.45	0.45

	Resistor 0.5W metal-film 1% (20k) mini pack 8	Jaycar	1	0.85	0.85
	Resistor 0.5W metal-film 1% (330Ω) mini pack 8	Jaycar	1	0.85	0.85
	Resistor 0.5W metal-film 1% (1k0) mini pack 8	Jaycar	1	0.85	0.85
	Resistor 0.5W metal-film 1% (10k) mini pack 8	Jaycar	1	0.85	0.85
	Resistor 0.5W metal-film 1% (100Ω) mini pack 8	Jaycar	1	0.85	0.85
	Solderless breadboard, 25-row / 400 tie-point (pre-punched)	Jaycar	3	6.75	20.25
	Electrolytic 1 μF 50 V, radial 2 mm LS, 5×11 mm	Jaycar	3	0.48	1.44
	Electrolytic 2.2 μF 50 V, radial 2 mm LS, 5×11 mm	Jaycar	1	0.48	0.48
	Potentiometer PCB, linear BIM, 9 mm, metal spline 18T	Jaycar	1	4.95	4.95
	LM393 dual comparator	Altronics	2	2.00	4.00
	RF choke 1.0 μH	Altronics	2	0.85	1.70

	RF choke 2.2 $\mu$ H	Altronics	3	0.75	2.25
	Ceramic capacitor 0.22 $\mu$ F 50 V (Y5V, 5 mm)	Altronics	1	0.40	0.40
	Polyester/green cap 0.001 $\mu$ F 100 V (5 mm)	Altronics	2	0.35	0.70
	LM3900 quad Norton op-amp	Altronics	1	2.60	2.60
	Infrared photo LED receiver	Altronics	1	2.70	2.70
	Laser diode module	Altronics	1	4.65	4.65
	ESP32-S3- WROOM-1-N16R8 Wi-Fi/BT module	Altronics	1	38.75	38.75
	Photodiode PIN 720- BPX65	Mouser Electronics	2	10.03	20.06
Total Cost (\$AUD)					496.80