

# Project Cooler Budget

Modules	Parts	Unit Cost	Quantity	Cost
<b>Structure/Chasis</b>				
Cooler	Coleman 100qt	\$69.97	1	\$69.97
<b>Micro Controller</b>				
Micro Controller	Raspberry Pi 4	\$35.00	1	\$35.00
<b>Temperature Regulation</b>				
Temperature Sensor	DS18B20 Waterproof Temp Sensors	\$2.20	2	\$4.40
<b>Power Control Unit</b>				
Charging Applications	Qi Wireless Charging Transmitter	\$26.95	2	\$53.90
Solar Panel	ECO-Worthy	\$33.00	1	\$33.00
Battery	Miadi LFP16AH	\$59.99	2	\$119.98
Wired USB Charging	YM1236 Dual USB Charger	\$9.59	1	\$9.59
AC Battery Charger	NOCO Genius10	\$64.96	1	\$64.96
12V-5V Buck Converter	DROK 5A USB Voltage Regulator	\$9.99	1	\$9.99
12V-5V Buck Converter	Yipin Hexha DC 5V Converter Module	\$14.99	1	\$14.99
<b>Locking Mechanism</b>				
RFID	RC 522	\$5.49	1	\$5.49
Servo	Micro SG90	\$5.95	1	\$5.95
<b>LED Lights</b>				
LED Light Strip	Alitove WS2812B RGB LED Strip	\$23.99	1	\$23.99
Photoresistor	Photocell	\$0.95	1	\$0.95
<b>GPS</b>				
GPS Module	BN-880 GPS Module	\$18.99	1	\$18.99
<b>Inputs</b>				
TouchScreen	Sunfounder 7 inch	\$65.99	1	\$65.99
<b>Outputs</b>				
Speakers	Low Profile Marine Speakers	\$29.99	1	\$29.99
Amp board	TPA3116,DAMGOO	\$22.99	1	\$22.99
<b>Other Components</b>				
Analog to Digital Converter	MCP3008	\$3.75	1	\$3.75

Misc				
MOSFET	FQP30N06 N-Channel MOSFET	\$0.90	3	\$2.70
Lid Position Sensor	Magnetic Reed Switch	\$5.00	1	\$5.00
Terminal Block	600V 25A Dual Row Screw Terminal	\$2.83	2	\$5.66
Insulation Shield	3MM Reflective Foam Insulation	\$16.88	1	\$16.88
Connector Plug	LanHong 2 Pin Connector Plug	\$1.20	2	\$2.40
Foam Board	1" Thick Polystyrene Foam Board	\$20.99	1	\$20.99
USB Cable	DTECH Type A to A USB Cable	\$6.98	2	\$13.96
Power Switch	Magic&Shell Round Rocker Switch	\$1.75	1	\$1.75
Drain Plug	Cooler Drain Plug Replacement	\$11.99	1	\$11.99
Plexiglass	Optix Plexiglass	\$34.00	2	\$68.00
3d Printing Filament	1.75mm PLA Filament 1kg	\$20.00	1	\$20.00
Solar Panel Metal Bracket	Armstrong 2' Cross Tee	\$1.90	1	\$1.90
Sliding Lock	ReliaBilt Zinc Steel Barrel Bolt	\$2.68	1	\$2.68
Wooden Dowel	Wooden Dowel	\$1.50	1	\$1.50
Various Screws and Bolts	Various Screws and Bolts	\$5.00	1	\$5.00
Total				\$774.28