

Product Name	Description (Use in Project)	Unit Price	Qty	Total Cost	Link						
Acrylic Mirror Sheet	Reflective mirror surface for concentrating sunlight onto the thermal absorber.	\$15.35	1	\$15.35	https://a.aliexpress.com/_mqZn0qZ						
Aluminum Sheeting	Base for the Acrylic Mirror Sheet to be placed on	\$8.10	3	\$24.30	https://a.aliexpress.com/_mCa0g89						
Plywood Panel	Wood sheet for mounting mirrors and building structural surfaces.	\$17.48	1	\$17.48	https://www.homedepot.com/p/OSB-7-16-Application-as-4ft-X-8-ft-Sheathing-Panel-386081/202106230						
2x2x8ft Plank	Wood planks for building frame, supports, and mounts.	\$2.97	3	\$8.91	https://www.homedepot.com/p/2-in-x-2-in-x-8-ft-Furring-Strip-Board-165360/202076422						
200 Pcs Stainless Steel Screws	Fasteners for assembling wood frame, mirrors, heatsinks, and hardware.	\$2.97	1	\$2.97	https://a.aliexpress.com/_mLEqEv						
Compression Springs	Springs to allow adjustable mirror angles (attach between mirror mounts and frame).	\$1.97	3	\$5.91	https://a.aliexpress.com/_mOTIej						
Aluminum Bar 6mmx60mmx500mm	Metal sheet to use as absorber plate beneath focused sunlight (better heat conduction than wood).	\$27.71	1	\$27.71	https://a.aliexpress.com/_mMZBSHR						
Thermoelectric Module (TEG) 3 Piece	Thermoelectric generator modules to convert heat differential to electrical energy; plan to use 3	\$10.08	1	\$10.08	https://a.aliexpress.com/_mQcTib						
8g Thermal Paste Compound	Thermal interface paste to improve heat transfer between absorber and TEG hot side.	\$5.29	1	\$5.29	https://a.aliexpress.com/_mQcWkj						
Aluminum Heatsink With Fan	Combined heatsink and fan for cooling TEG cold side to maximize ΔT.	\$6.63	3	\$19.89	https://a.aliexpress.com/_mQSK7x						
Electronic Wiring (5M 18AWG)	General-purpose wire for electrical connections (positive/negative DC).	\$6.78	1	\$6.78	https://a.aliexpress.com/_mSjaU1						
5V Power Bank 2000mAh	Battery power supply with USB in/out, powers fans & electronics.	\$14.44	1	\$14.44	https://a.aliexpress.com/_mP10GV						
High Precision Voltmeter Ammeter	Meter to display voltage and current for monitoring TEG output and battery.	\$6.46	1	\$6.46	https://a.aliexpress.com/_mM2M73						
DC-DC Boost Converter	Converts TEG raw voltage to 5V USB charging voltage for power bank charging circuit.	\$2.44	1	\$2.44	https://a.aliexpress.com/_mOQLXl						
USB Micro cord	Connects Boost Converter to Power Bank	\$1.13	1	\$1.13	https://a.aliexpress.com/_mNWu6F3						
Blocking Diode (Schottky)	Prevents backflow discharge from battery into TEG array at low voltages.	\$4.13	1	\$4.13	https://a.aliexpress.com/_mL1Xnjz						
**Heatshrink/tools/other already owned											
			Subtotal	\$173.27							
Contingency	In case of broken/missing parts or changes in pricing	10%	Total:	\$190.60							