

Project Power Budget				
Modules	Parts	Voltage (V)	Amps (A)	Power (W)
Micro Controller				
Micro Controller	Raspberry Pi 4	5 V	3 A	15 W
Temperature Regulation				
Temperature Sensor	DS18B20	5V	1 mA	5 mW
Power Control Unit				
Charging Applications	Qi Wireless Charging Transmitter	5 V	1 A x 2 = 2A	10 W
Wired USB Charging	YM1236 Dual USB Charger	5 V	2.1 A	10.5 W
Locking Mechanism				
Servo	SG90	5V	360 mA	1.8 W
RFID	RC 522	3.3V	26 mA	85.8 mW
GPS				
GPS Module	BN-880 GPS Module	5V	50 mA	250 mW
Inputs				
TouchScreen	Sunfounder 7"	5V	480 mA	2.4W
Outputs				
Speaker	Low Profile Marine Speakers			
Amp board	TPA3116,DAMGOO	5 - 27 V	> 3 A	UP to 200 W
LED Light Strip	Addressable Programmable LED F	5V	4.05 A	20.25 W
Other Components				
Analog to Digital Converter	MCP3008	5V	500 uA	2.5 mW
Total			15.0675	260.2898
			15.1 A	260.3 A