Working Example

If a 2 way Freezer/Refrigerator has an average power consumption of 1.5A/hr when operating at +3 degrees @ 32 degrees ambient temperature the following calculation can be applied to this situation.

Under normal operating conditions and ambient temperatures an 80 watt solar panel kit will provide on average 3A per hour.

This means that for every 1 hour that the solar panel kit is providing power to the battery, 1.5A/hr will be used by the refrigerator, whilst a further 1.5A/hr will be stored in the battery.

The voltage & current output of the solar panel will vary depending on the weather conditions, wind, direct sunlight or shade and as a result the final output can not be guaranteed.

40 Watt Solar Panel

80 Watt Solar Panel

120 Watt Solar Panel

Part No	Cell Type	Output Power	Working Voltage	Working Current	Open Voltage	Short Circuit Current	SLA Voltage	Size Open	Size Folded	Weight
522040	Mono Crystalline	40 Watt (2 x 20Watts)	VOP(V): 17.2	LOP(A): 2.30	VOC(V): 21.5	ISC (A):1.24	12	1282(L) x 296(W) x 25(D)	641(L) x 296(W) x 50(D)	5.5Kg
522180	Mono Crystalline	80 Watt (2 x 40Watt)	VOP(V): 17.2	LOP(A): 4.66	VOC(V): 21.5	ISC (A):2.50	12	1196(L) x 546(W) x 35(D)	611(L) x 546(W) x 70(D)	10Kg
522310	Mono Crystalline	120 Watt (2 x 60Watt)	VOP(V): 17.6	LOP(A): 6.24	VOC(V): 21.6	ISC (A):3.30	12	1057(L) x 914(W) x 35(D)	1057(L) x 457(W) x 70(D)	12Kg