

LOAD CALCULATIONS FOR THE AJ - 1300 STUDER SOLAR SYSTEM

A SOLAR SYSTEM THAT SUITS YOUR DAILY NEEDS





COMPATIBLE APPLIANCES



LOAD CALCULATIONS FOR THE AJ - 1300 STUDER SOLAR SYSTEM:

IN THE TABLE BELOW, YOU CAN FIND THE ESTIMATIONS FOR DIFFERENT APPLIANCES. THIS WILL HELP YOU TO MAKE A ROUGH CALCULATION FOR YOUR SOLAR NEEDS. PLEASE KEEP IN MIND THAT THIS ARE ESTIMATIONS AND THAT THE FIGURES IN YOUR INDIVIDUAL CASE CAN BE DIFFERENT DEPENDING ON THE APPLIANCE AND THE ENVIRONMENT.

Appliances	Est. Consumption	Can run on AJ-1300	
Mobile phone, tablet	5 W/h		
LED light short	10 W/h	S	
LED light long	18 W/h		
LED TV small	25 W/h		
Inkjet printer	20 W/h	S	
Sat box	35 W/h		
Church sound system	250 W/h		
Bar fridge (100l)	300 W/day		
Small freezer (100l)	750 W/day	\bigcirc	
Rice cooker 1.8l	700 W/h		
Micro wave	1000 W/h		
Davey water pump	1200 W/h		
Angle grinder	1200 W/h		



AJ-1300 SOLAR KIT:

THE AJ-1300 SYSTEM PRODUCES ABOUT 2500 WH PER DAY. YOU CAN NOW CALCULATE WHAT LOADS CAN BE POWERED UP DEPENDING ON YOUR NEEDS BY USING THE FOLLOWING CALCULATION FORMULA:

QUANTITY X CONSUMPTION X HOURS = CONSUMPTION IN WH (WATT HOURS)

	Appliances	Consumption	Hours	Watt Hours (WH)	
5	LED light (short)	10 W/h	5	250	
2	LED security light (short)	10 W/h	12	240	
1	TV	25 W/h	3	75	
1	Sat box	35 W/h	3	105	
1	Laptop during the day	50 W/h	8	400	
1	Rice cooker	700W/h	2	1400	
1	Microwave	1000W/h	0.25	250	
1	Small Fridge (100l)	300W/day		300	-
Total Consumption				2320Wh	1

AS THE TOTAL CONSUMPTION IS BELOW 2500WH, THE AJ-1300 WILL BE ABLE TO COVER FOR THE LOADS ABOVE.

LET'S FIND OUT, IF A AJ-1300 CAN POWER UP THE FOLLOWING APPLIANCES

	Appliances	Consumption	Hours	Watt Hours (WH)	
5	LED light (short)	10 W/h	5	250	
1	Rice cooker	700W/h	2	1400	
1	Microwave	1000W/h	0.25	250	
1	Small Fridge (100l)	300W/day		300	
1	Freezer (100l)	750W/day		750	
1	Water pump	1200Wh	1	1200	
Total Consumption			4150Wh		

AS THE TOTAL CONSUMPTION EXCEEDS 2500WH, THE AJ-1300 SOLAR SYSTEM IS NOT SUITED FOR THE LOAD CALCULATION ABOVE. YOU WILL HAVE TO LOOK FOR A BIGGER SOLAR SYSTEM. MAF TECHNOLOGY'S TECHNICIANS ARE HAPPY TO FIND OUT WITH YOU WHAT SUITS BEST YOUR NEEDS.



MAINTENANCE:

- MAKE SURE YOU CLEAN THE PANELS FROM TIME TO TIME IF DIRTY
- KEEP THE INVERTER FREE OF DUST AN BUGS
- IF THE SYSTEM STOPS FUNCTIONING, IT'S MOST LIKELY THAT YOU HAVE USED TOO MUCH LOADS TO AVOID THIS, REDUCE THE LOAD AND LET IT CHARGE FOR SOMETIME

CONTACT DETAILS

IF YOU ARE STUCK DURING THE PROCESS OF SET UP OR NEED CONFIRMATION REGARDING THE AJ SYSTEM SET UP THEN CONTACT OUR ELECTRONIC TECHNICIANS WHO WILL BE ABLE TO ASSIST YOU WITH ANY QUIRES OR CONCERNS.

Contact

Landline: (+675) 532 2670

Address MAF Technologies

BMobile: (+675) 7528 1345 Digicel: (+675) 7250 3958 ⊠maftech.info@mafint.org ⊠maftech.solar@mafint.org Facebook | Instagram | Whatsapp | YouTube P.O.Box 1307, Morchhauser street Goroka, 441, EHP, Papua New Guinea