

حاسبة استهلاك الطاقة

Energy Demand

General Data

	-- select --	Country
C°		Temperature
m		Altitude
kWh/m²/day		Solar daily irradiance

Calculation Settings

n/a Vca	Local rated voltage
n/a Hz	Local frequency
☐	?There is any 3-phase Consumer in the installation
☐	?(The installation provides power to a hospital (very sensitive structure

Energy Consumption	Working Hours					S	S	P	Quantity	Appliance/Device
						Avg	Max			
						((VA	((VA	((W		
	Night	Evening	Afternoon	Midday	Morning	((VA	((VA	((W		
						((VA	((VA	((W		
						((VA	((VA	((W		
ResetRemove lastAdd row										

- General ●
- Generator ●
- Battery ●
- Solar ●

Estimation of Needs

Energy Consumption per Day

n/a W a day	Total
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Energy Consumption per Day

n/a W a day (Low consumption devices (Class 1

n/a W a day (High consumption devices (Class 2

n/a Wh Usefull energy / day

n/a Wh Usefull energy / night

Power Needed

n/a VA Total

n/a VA (Low consumption devices (Class 1

n/a VA (High consumption devices (Class 2

n/a VA Average power necessary

Generator

Additional Information

Automatic selection (Voltage specification (single-P / 3-P

:Cable length between

10 m the generator and switchgear

10 m the grid and switchgear

10 m the switchgear and the main electrical dashboard

:Wire Gauge recommendation

n/a mm² between generator and switchgear

n/a mm² between grid and switchgear

n/a mm² between switchgear to dashboard

Size Recommendations

n/a KVA (Size recommended (PRP

n/a VA (Power (ESP

Size Recommendations

n/a	Voltage type
n/a V	Rated voltage
n/a Hz	Rated frequency
n/a A	Output circuit-breaker size
n/a l/h	Estimated fuel consumption
n/a l/h	Estimated oil consumption
n/a l/250h	(oil change every 250h 1)

Battery System

Additional Information

V	12	Unit voltage
Ah	1000	Unit capacity
%	50	(Authorized discharge ratio (no less than 40%
h	4	(Charge available time (minimum 4hours
	1	Days of autonomy needed if no charge

Recommendation

n/a Wh	Energy to accumulate
n/a V	Voltage recommended
n/a units	Number of batteries needed with the specifications provided
n/a	Type of conection
n/a A	Circuit breaker ideal size
n/a A	Charger size at least

Solar System

Additional Information

n/a kWh/m ² /day	Solar daily irradiance
n/a Wc	Usefull max power per day
n/a A	Regulator size
▼ 12	(Solar panels unit voltage (recommendation: n/aV
Wc	Solar panels unit max power

Recommendation

n/a	Minimum number of solar panels
n/a	Recommended number of solar panels
n/a	Solar charge controller: type of regulator
n/a V	Solar charge controller: rated voltage
n/a A	Solar charge controller: unit max current
n/a	Solar charge controller: quantity

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