Calculateur de consommation d'énergie

Energy Demand

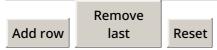
General Data

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

Calculation Settings

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

Appliance/Device Quantity P (W) Max Avg (VA) (VA) Morning Midday Afternoon Evening Night



- General
- Generator
- Battery
- Solar

Estimation of Needs

Energy Consumption per Day

Total	n/a W a day
Low consumption devices (C	
High consumption devices (0	Class 2) n/a W a day
Usefull energy / day	n/a Wh
Usefull energy / night	n/a Wh

Power Needed

Total	n/a VA
Low consumption devices (Cla	ass 1) n/a VA

Power Needed

High consumption devices (Class	2) n/a VA
Average power necessary	n/a VA

Generator

Additional Information

Voltage specification (single-P / 3-P)	Automatic selection 🔻
Cable length between:	
the generator and switchgear	10 m ▼
the grid and switchgear	10 m ▼
the switchgear and the main electrical dashboard	10 m ▼
Wire Gauge recommendation:	
between generator and switchgear	n/a mm²
between grid and switchgear	n/a mm²
between switchgear to dashboard	n/a mm²

Size Recommendations

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

Battery System

Additional Information

Unit voltage	12	٧
Unit capacity	1000	Ah
Authorized discharge ratio (no less than 40%)	50	%
Charge available time (minimum 4hours)	4	h
Days of autonomy needed if no charge	1	

Recommendation

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

Solar System

Additional Information

Solar daily irradiance	n/a kWh/m²/day
Usefull max power per day	n/a Wc
Regulator size	n/a A
Solar panels unit voltage (recommendation:	n/aV) 12 V 🔻
Solar panels unit max power	Wc

Recommendation

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

Ouvert en pleine vue