

PV stand alone system calculation

PV generator on request

PV stand alone system SIZING sheet

The customer needs

CLIENT **Company XYZ**

OPERATEUR **AAL**

DATE **April 28, 09**

Specs summary

Control device v 4.1
12 V
Stand by 3 mA - Operation 100 mA, 30min/day

METEO DATA ref.	N°	106	ITALIE - MILANO 60° Sud
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ELECTRICAL CONS.

Nomnial volt. **12 V**

The nominal voltage

The location of solar irradiation data from our database for orientation and tilt angle

Detailed cons.	Current mA	Duration par day (24h)			Nb	total in hrs	mAhrs/day
		hrs	Min	sec.			
Mode 1 Stand by	3	24				24	72
Mode 2 Measur.	100		30			0.5	50
Mode 3						0	0
Mode 4						0	0
Max current	103					0	0
TOTAL							122.00

The electrical consumptions

Daily consumption per 24h period (in mAhrs) : **122.00**

Total manual cons. (mAhrs/day) **or 0 if consumption is auto**

MODULES

The selected module ref.

Whrs/day : **0.7**

Security coefficient : **0.7**

Total nb	Type	Total current STC
1	28/300/150	85 mA

The power reduction coefficient (direct, in-line losses ...)

composed of 1 branch(s) in parallel of 1 module(s) in series

Specifications of 1 module : Voltage 12 V I load : 85 mA Vload : 15. V

RECHARGEABLE BATTERY

The battery nominal capacity

Efficient cacapity coefficient : **0.7**

Capacity	Ahrs
6	

Selfdischarge Nov - Feb : **0** March - May & Sept -Oct **0** June-Aug **0**

(% of nom. Capacity per day)

The results in terms of autonomy in the dark

The capacity reduction coefficient (cold, depth of discharge)

RESULTS

seasonal storage	autonomy without illumination	Charge current STC
3 months	-3.14 Ah	C / 71

or 1.06 Ahrs

