

## Performance of Grid-connected PV

### PVGIS estimates of solar electricity generation

Location: 47°43'4" North, 19°10'59" East, Elevation: 111 m a.s.l.,  
 Solar radiation database used: PVGIS-CMSAF

Nominal power of the PV system: 13.5 kW (crystalline silicon)  
 Estimated losses due to temperature and low irradiance: 12.8% (using local ambient temperature)  
 Estimated loss due to angular reflectance effects: 3.2%  
 Other losses (cables, inverter etc.): 14.0%  
 Combined PV system losses: 27.4%

Fixed system: inclination=20 deg., orientation=39 deg.				
Month	Ed	Em	Hd	Hm
Jan	12.80	396	1.17	36.4
Feb	22.20	622	2.06	57.8
Mar	38.80	1200	3.77	117
Apr	51.30	1540	5.22	157
May	55.30	1720	5.83	181
Jun	56.40	1690	6.03	181
Jul	57.10	1770	6.18	191
Aug	52.90	1640	5.65	175
Sep	40.90	1230	4.19	126
Oct	29.90	928	2.94	91.2
Nov	15.70	470	1.49	44.8
Dec	9.79	303	0.91	28.1
Year	37.00	1130	3.80	115
Total for year		13500		1390

Ed: Average daily electricity production from the given system (kWh)  
 Em: Average monthly electricity production from the given system (kWh)  
 Hd: Average daily sum of global irradiation per square meter received by the modules of the given system (kWh/m2)  
 Hm: Average sum of global irradiation per square meter received by the modules of the given system (kWh/m2)

PVGIS (c) European Communities, 2001-2012  
 Reproduction is authorised, provided the source is acknowledged.  
<http://re.jrc.ec.europa.eu/pvgis/>

Disclaimer:

The European Commission maintains this website to enhance public access to information about its initiatives and European Union policies in general. However the Commission accepts no responsibility or liability whatsoever with regard to the information on this site.

This information is:

- of a general nature only and is not intended to address the specific circumstances of any particular individual or entity;
- not necessarily comprehensive, complete, accurate or up to date;
- not professional or legal advice (if you need specific advice, you should always consult a suitably qualified professional).

Some data or information on this site may have been created or structured in files or formats that are not error-free and we cannot guarantee that our service will not be interrupted or otherwise affected by such problems. The Commission accepts no responsibility with regard to such problems incurred as a result of using this site or any linked external sites.