

## Performance of Grid-connected PV

### PVGIS estimates of solar electricity generation

Location: 50°37'45" North, 3°3'26" East, Elevation: 29 m a.s.l.,  
Solar radiation database used: PVGIS-CMSAF

Nominal power of the PV system: 1.0 kW (crystalline silicon)

Estimated losses due to temperature and low irradiance: 8.3% (using local ambient temperature)

Estimated loss due to angular reflectance effects: 3.0%

Other losses (cables, inverter etc.): 14.0%

Combined PV system losses: 23.5%

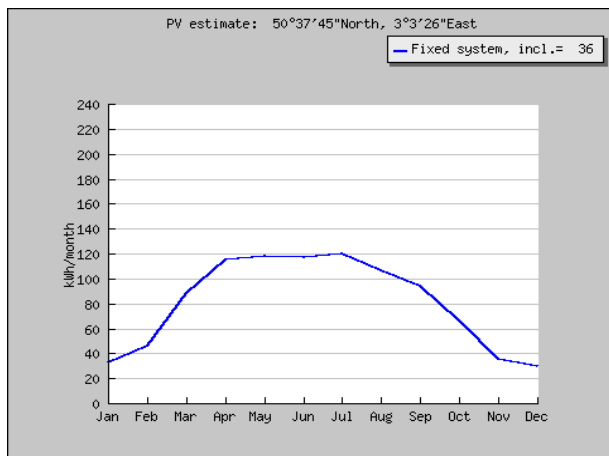
Fixed system: inclination=36 deg., orientation=0 deg.				
Month	Ed	Em	Hd	Hm
Jan	1.05	32.5	1.26	39.2
Feb	1.66	46.5	2.04	57.2
Mar	2.84	88.1	3.58	111
Apr	3.84	115	5.02	151
May	3.81	118	5.07	157
Jun	3.90	117	5.28	158
Jul	3.86	120	5.28	164
Aug	3.43	106	4.64	144
Sep	3.13	93.9	4.15	124
Oct	2.14	66.3	2.75	85.1
Nov	1.19	35.7	1.47	44.1
Dec	0.95	29.6	1.15	35.6
Year	2.65	80.7	3.48	106
Total for year		969		1270

Ed: Average daily electricity production from the given system (kWh)

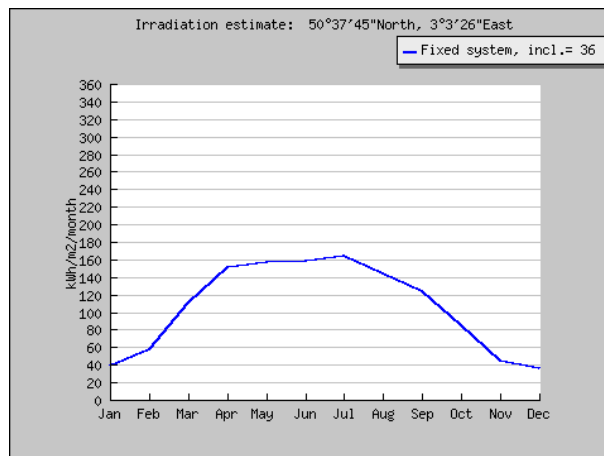
Em: Average monthly electricity production from the given system (kWh)

Hd: Average daily sum of global irradiation per square meter received by the modules of the given system (kWh/m<sup>2</sup>)

Hm: Average sum of global irradiation per square meter received by the modules of the given system (kWh/m<sup>2</sup>)



Monthly energy output from fixed-angle PV system



Monthly in-plane irradiation for fixed angle

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<http://re.jrc.ec.europa.eu/pvgis/>

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