

Performance of Grid-connected PV

PVGIS estimates of solar electricity generation

Location: 37°14'23" North, 5°33'2" West, Elevation: 106 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: 12.0% (using local ambient temperature)

Estimated loss due to angular reflectance effects: 2.7%

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

Combined PV system losses: 26.4%

| Fixed system: inclination=45 deg., orientation=0 deg. | | | | |
|--|------|------|------|------|
| Month | Ed | Em | Hd | Hm |
| Jan | 3.57 | 111 | 4.60 | 143 |
| Feb | 4.12 | 115 | 5.39 | 151 |
| Mar | 4.47 | 139 | 6.02 | 187 |
| Apr | 4.47 | 134 | 6.07 | 182 |
| May | 4.43 | 137 | 6.11 | 189 |
| Jun | 4.61 | 138 | 6.50 | 195 |
| Jul | 4.76 | 148 | 6.78 | 210 |
| Aug | 4.89 | 152 | 6.95 | 216 |
| Sep | 4.63 | 139 | 6.47 | 194 |
| Oct | 4.23 | 131 | 5.77 | 179 |
| Nov | 3.85 | 115 | 5.07 | 152 |
| Dec | 3.53 | 109 | 4.56 | 141 |
| Year | 4.30 | 131 | 5.86 | 178 |
| Total for year | | 1570 | | 2140 |

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)

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

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