Performance of Grid-connected PV

NOTE: before using these calculations for anything serious, you should read [this]

PVGIS estimates of solar electricity generation

Location: 47°26'2" North, 20°42'16" East, Elevation: 87 m a.s.l.,

Solar radiation database used: PVGIS-CMSAF

Nominal power of the PV system: 9.9 kW (crystalline silicon)
Estimated losses due to temperature and low irradiance: 13.5% (using local ambient temperature)
Estimated loss due to angular reflectance effects: 2.9%
Other losses (cables, inverter etc.): 14.0%
Combined PV system losses: 27.8%

Fixed system: inclination=35°, orientation=35°				
Month	E_d	E_m	H_d	H_m
Jan	10.50	326	1.32	40.8
Feb	17.40	486	2.21	62.0
Mar	30.90	957	4.16	129
Apr	38.70	1160	5.43	163
May	40.30	1250	5.84	181
Jun	41.50	1250	6.09	183
Jul	41.70	1290	6.18	192
Aug	40.00	1240	5.88	182
Sep	31.90	958	4.51	135
Oct	24.80	768	3.36	104
Nov	14.70	442	1.92	57.6
Dec	8.28	257	1.04	32.2
Yearly average	**28.4**	**865**	**4.00**	**122**
Total for year		**10400**		**1460**

E_d: Average daily electricity production from the given system (kWh)
E_m: Average monthly electricity production from the given system (kWh)
H_d: Average daily sum of global irradiation per square meter received by the modules of the given system (kWh/m^2)
H_m: Average sum of global irradiation per square meter received by the modules of the given system (kWh/m^2)