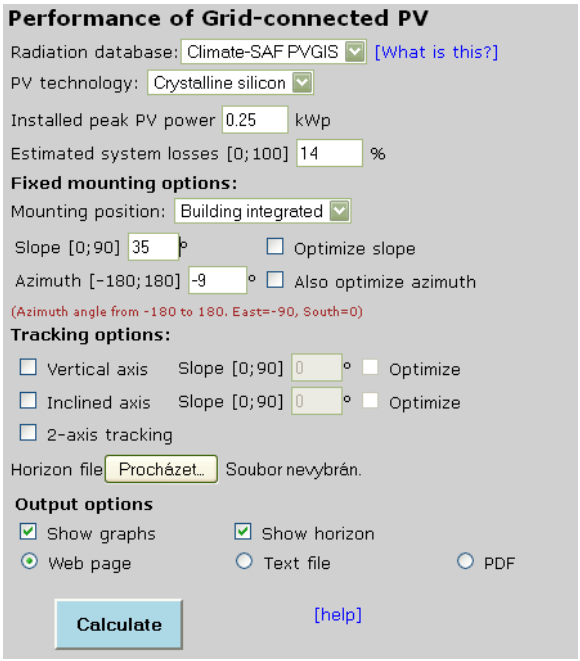
Výpočet energie z FV panelů:



Performance of Grid-connected PV
NOTE: before using these calculations for anything serious, you should read [this]
PVGIS estimates of solar electricity generation
Location: 49°31'24" North, 15°17'19" East, Elevation: 460 m a.s.l.,

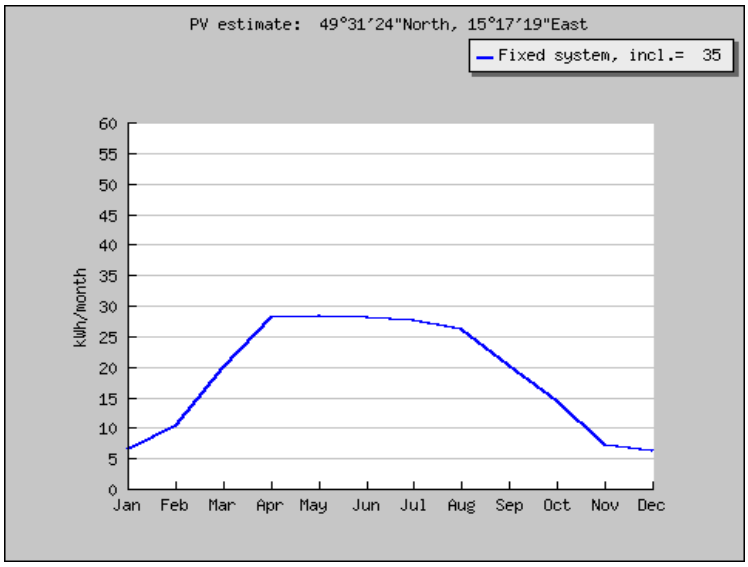
Solar radiation database used: PVGIS-CMSAF

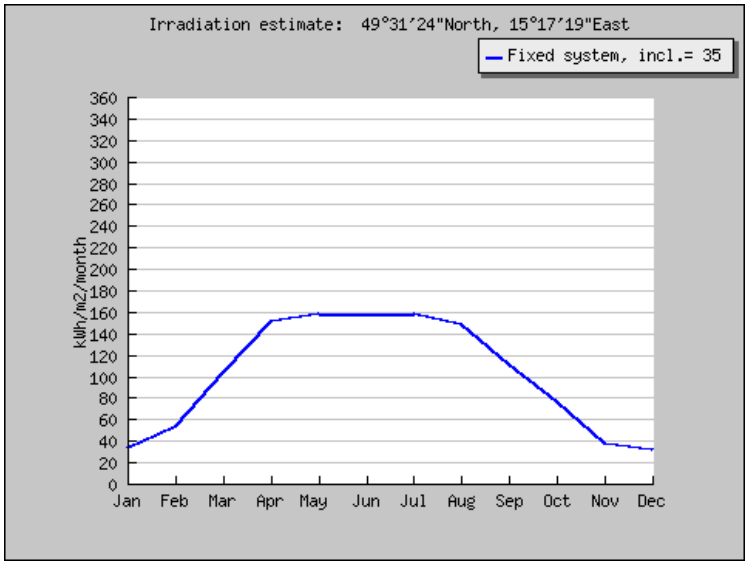
Nominal power of the PV system: 0.2 kW (crystalline silicon)
Estimated losses due to temperature and low irradiance: 12.0% (using local ambient temperature)
Estimated loss due to angular reflectance effects: 2.9%
Other losses (cables, inverter etc.): 14.0%
Combined PV system losses: 26.5%

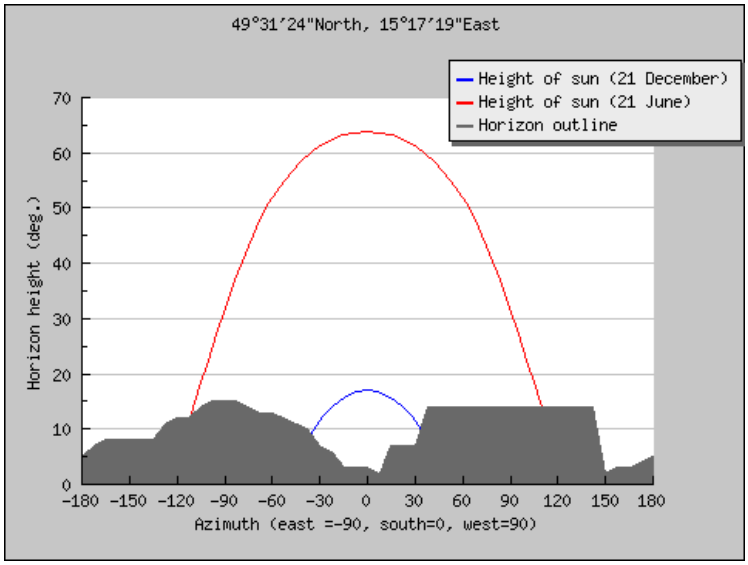
Fixed system: inclination=35°, orientation=-9°				
Month	Ed	Em	Hd	Hm
Jan	0.21	6.54	1.06	32.8
Feb	0.37	10.4	1.89	52.9
Mar	0.64	19.9	3.34	103
Apr	0.94	28.0	5.05	152
May	0.91	28.3	5.09	158
Jun	0.94	28.2	5.29	159
Jul	0.89	27.7	5.09	158
Aug	0.85	26.2	4.79	149
Sep	0.68	20.2	3.69	111
Oct	0.46	14.3	2.45	75.9
Nov	0.24	7.15	1.24	37.2
Dec	0.20	6.22	1.04	32.1

Yearly average	0.611	18.6	3.34	102
Total for year	223	1220		

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 (kWh/m^2)
H_m: Average sum of global irradiation per square meter received by the modules of the given system (kWh/m^2)


PV estimate: 49°31'24"North, 15°17'19"East
Fixed system, incl.= 35
kWh/month
0
5
10
15
20
25
30
35
40
45
50
55
60
Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec


Irradiation estimate: 49°31'24"North, 15°17'19"East
Fixed system, incl.= 35
kWh/m2/month
0
20
40
60
80
100
120
140
160
180
200
220
240
260
280
300
320
340
360
Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec


49°31'24"North, 15°17'19"East
Height of sun (21 December)
Height of sun (21 June)
Horizon outline
Horizon height (deg.)
0
10
20
30
40
50
60
70
-180 -150 -120 -90 -60 -30 0 30 60 90 120 150 180
Azimuth (east =-90, south=0, west=90)