GLOBAL SOLAR ATLAS
BY WORLD BANK GROUP

臺南市

23°12'44", 120°10'56"
19, Tainan, Taiwan
Time zone: UTC+08, Asia/Taipei [CST]

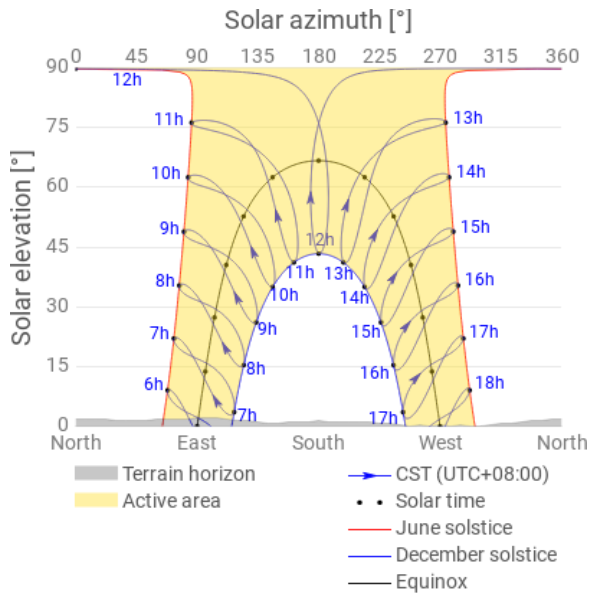
Report generated: 7 Jan 2021

SITE INFO

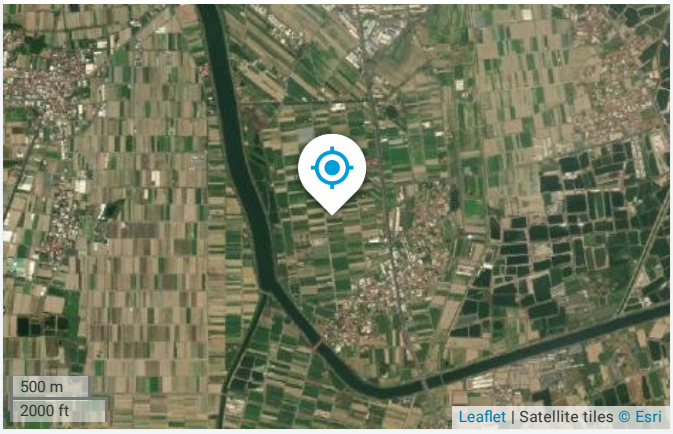
Map data

		Per year	
Specific photovoltaic power output	PVOUT specific	**1483**	kWh/kWp
Direct normal irradiation	DNI	**1326**	kWh/m^2
Global horizontal irradiation	GHI	**1747**	kWh/m^2
Diffuse horizontal irradiation	DIF	**833**	kWh/m^2
Global tilted irradiation at optimum angle	GTI opta	**1847**	kWh/m^2
Optimum tilt of PV modules	OPTA	**21 / 180**	°
Air temperature	TEMP	**23.8**	°C
Terrain elevation	ELE	**3**	m

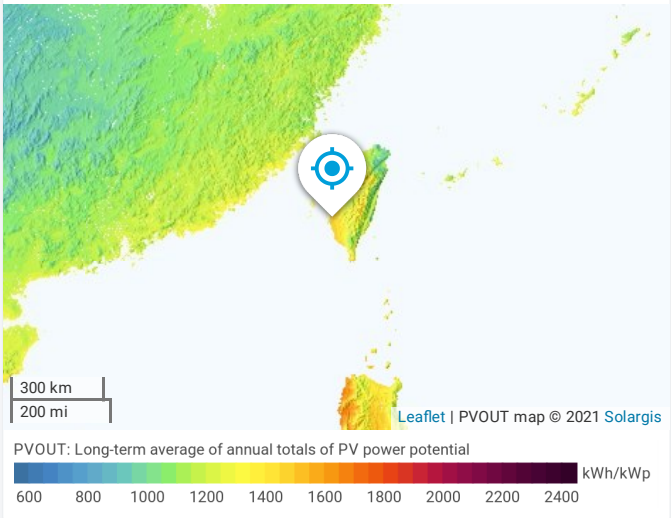
Horizon and sunpath



Map



PVOUT map



PV ELECTRICITY AND SOLAR RADIATION

Annual averages

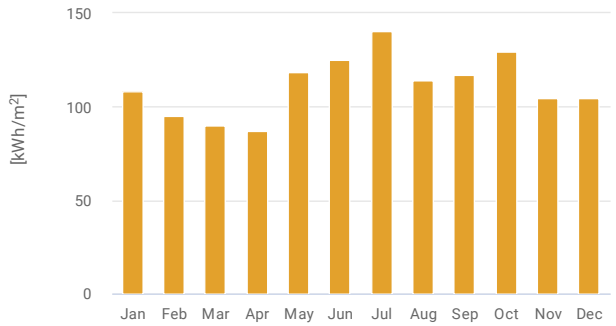
Direct normal irradiation

1334

kWh/m^2 per year

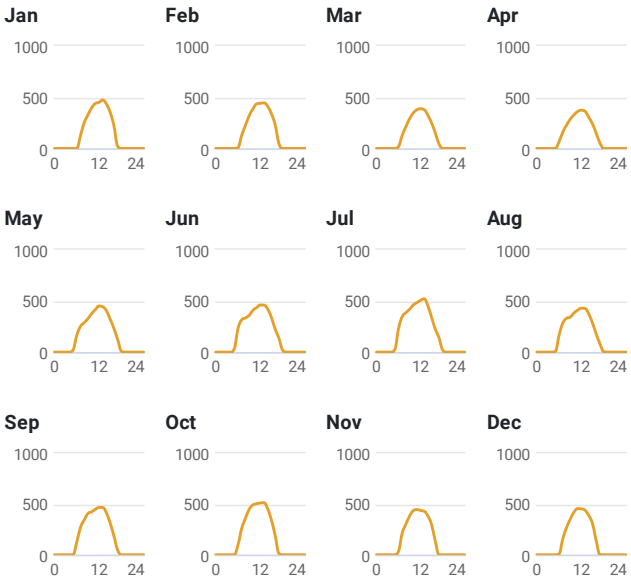
Monthly averages

Direct normal irradiation



Average hourly profiles

Direct normal irradiation [Wh/m^2]



UTC+08

Average hourly profiles

Direct normal irradiation [Wh/m^2]

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0 - 1												
1 - 2												
2 - 3												
3 - 4												
4 - 5												
5 - 6					20	33	26	7				
6 - 7		8	18	67	164	230	232	167	125	98	35	9
7 - 8	124	129	128	160	251	315	346	283	269	260	214	159
8 - 9	251	225	212	227	288	334	385	330	342	360	302	268
9 - 10	326	319	290	285	326	359	418	342	406	447	381	350
10 - 11	395	385	345	327	376	408	460	382	423	491	435	420
11 - 12	439	434	377	360	415	435	482	409	449	503	446	455
12 - 13	450	440	386	373	450	460	506	429	466	510	436	453
13 - 14	472	444	377	361	442	458	520	426	466	513	429	438
14 - 15	432	410	321	301	402	420	450	371	411	451	380	385
15 - 16	351	337	247	238	320	337	337	282	311	341	295	305
16 - 17	221	230	150	146	231	223	224	176	185	189	131	136
17 - 18	21	49	43	52	124	136	139	79	46	14		
18 - 19					9	19	20	5				
19 - 20												
20 - 21												
21 - 22												
22 - 23												
23 - 24												
Sum	3482	3409	2895	2899	3818	4167	4543	3688	3899	4177	3484	3378

GLOSSARY

Acronym	Full name	Unit	Type of use
DIF	Diffuse horizontal irradiation	kWh/m², MJ/m²	Average yearly, monthly or daily sum of diffuse horizontal irradiation (© 2019 Solargis)
DNI	Direct normal irradiation	kWh/m², MJ/m²	Average yearly, monthly or daily sum of direct normal irradiation (© 2019 Solargis)
ELE	Terrain elevation	m, ft	Elevation of terrain surface above/below sea level, processed and integrated from SRTM-3 data and related data products (© 2019 SRTM team)
GHI	Global horizontal irradiation	kWh/m², MJ/m²	Average annual, monthly or daily sum of global horizontal irradiation (© 2019 Solargis)
GTI	Global tilted irradiation	kWh/m², MJ/m²	Average annual, monthly or daily sum of global tilted irradiation (© 2019 Solargis)
GTI_opta	Global tilted irradiation at optimum angle	kWh/m², MJ/m²	Average annual, monthly or daily sum of global tilted irradiation for PV modules fix-mounted at optimum angle (© 2019 Solargis)
OPTA	Optimum tilt of PV modules	°	Optimum tilt of fix-mounted PV modules facing towards Equator set for maximizing GTI input (© 2019 Solargis)
PVOUT_total	Total photovoltaic power output	kWh, MWh, GWh	Yearly and monthly average values of photovoltaic electricity (AC) delivered by the total installed capacity of a PV system (© 2019 Solargis)
PVOUT_specific	Specific photovoltaic power output	kWh/kWp	Yearly and monthly average values of photovoltaic electricity (AC) delivered by a PV system and normalized to 1 kWp of installed capacity (© 2019 Solargis)
TEMP	Air temperature	°C, °F	Average yearly, monthly and daily air temperature at 2 m above ground. Calculated from outputs of ERA5 model (© 2019 NOAA and NASA)

ABOUT

This pdf report (the “Work”) is automatically generated from the Global Solar Atlas online app (https://globalsolaratlas.info/), prepared by Solargis under contract to The World Bank, based on a solar resource database that Solargis owns and maintains. It provides the estimated solar resource, air temperature data and potential solar power output for the selected location and input parameters of a photovoltaic (PV) power system.

Sources: Solar database and PV software © 2019 Solargis