GLOBAL SOLAR ATLAS

BY WORLD BANK GROUP

캔자스

38.427774°, -097.119141°

Nighthawk Road, Kansas, United States Time zone: UTC-06, America/Chicago [CST]

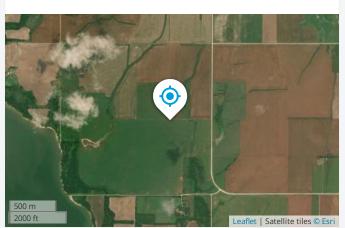
Neport generated: 13 Dec 2024

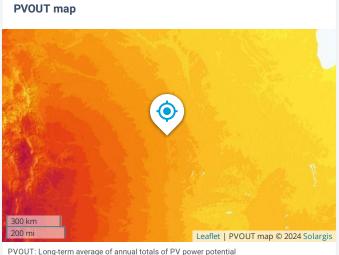
SITE INFO

Map data			Per year
Specific photovoltaic power output	PVOUT specific	1586.2	kWh/kWp
Direct normal irradiation	DNI	1845.5	kWh/m ²
Global horizontal irradiation	GHI	1645.1	kWh/m ²
Diffuse horizontal irradiation	DIF	577.1	kWh/m ²
Global tilted irradiation at optimum angle	GTI opta	1930.5	kWh/m ²
Optimum tilt of PV modules	OPTA	35 / 180	0
Air temperature	TEMP	13.8	°C
Terrain elevation	ELE	N/A	

Horizon and sunpath Solar azimuth [°] 90 135 180 225 270 315 360 45 75 11h/ Solar elevation [°] 10h 18h 15 North South North East West Terrain horizon CST (UTC-06:00) Active area · Solar time June solstice December solstice Equinox

Мар





PVUU	P v OO 1. Long-term average of annual totals of P v power potential								
									kWh/kWp
600	800	1000	1200	1400	1600	1800	2000	2200	2400



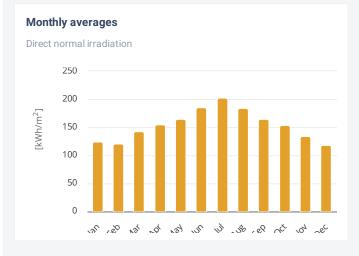


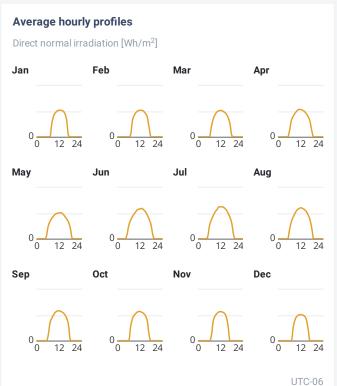
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PV ELECTRICITY AND SOLAR RADIATION







Average hourly profiles Direct normal irradiation [Wh/m²] Feb Mar Jul Oct Apr May Jun Aug Sep Nov Dec 0 - 1 1 - 2 2 - 3 3 - 4 4 - 5 5 - 6 6 - 7 7 - 8 8 - 9 9 - 10 10 - 11 11 - 12 12 - 13 13 - 14 14 - 15 15 - 16 16 - 17 17 - 18 18 - 19 19 - 20 20 - 21 21 - 22 22 - 23 23 - 24 75 262 364 437 491 540 574 582 592 564 528 460 380 40 257 371 453 522 570 621 623 233 336 397 122 322 401 463 507 536 534 519 497 452 392 305 339 438 507 557 581 584 571 548 508 441 305 46 323 424 480 507 519 516 500 454 201 349 432 486 507 516 336 426 500 560 587 605 101 384 484 531 562 568 409 472 504 521 516 505 457 414 477 503 510 446 483 498 505 506 481 440 558 535 468 501 481 417 505 482 445 389 325 203 200 3,994 4,319 4,584 5,293 6,183 6,535 5,930 5,487 4,478 3,798 5,164 4,940 Sum



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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 (© 2024 Solargis)
DNI	Direct normal irradiation	kWh/m², MJ/m²	Average yearly, monthly or daily sum of direct normal irradiation (© 2024 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 (SRTM v4.1 © 2004 - 2024, CGIAR-CSI)
GHI	Global horizontal irradiation	kWh/m², MJ/m²	Average annual, monthly or daily sum of global horizontal irradiation (© 2024 Solargis)
GTI	Global tilted irradiation	kWh/m², MJ/m²	Average annual, monthly or daily sum of global tilted irradiation (© 2024 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 (© 2024 Solargis)
OPTA	Optimum tilt of PV modules	o	Optimum tilt of fix-mounted PV modules facing towards Equator set for maximizing GTI input (© 2024 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 (© 2024 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 (© 2024 Solargis)
TEMP	Air temperature	°C, °F	Average yearly, monthly and daily air temperature at 2 m above ground. Calculated from outputs of ERA5 model (© 2024 ECMWF, post-processed by Solargis)

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.

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Sources: Solar database and PV software @ 2024 Solargis





