

## Dataset-specific Metadata

Metadata schema of the dataset (columns/fields)

**Resource:** Synthetic photovoltaic data ; **Filename:** pv\_output\_data.csv

Column name (Metadata)	Description	Type	Value (Example)
timestamp	Time reference identifying the data record	date	2022-12-31 16:00:00
i_sc	Short circuit module current	float	4.324027131633E-06
v_oc	Open circuit module voltage	float	8.304961596034450
i_mp	Module current at maximum power point	float	3.55146519258829E-06
v_mp	Module current at maximum power point	float	6.03688699792638
p_mp	Module power at maximum power point	float	2.14397940447244E-05
i_x	Sandia Array Performance Model IV curve parameter	float	4.14235319352097E-06
i_xx	Sandia Array Performance Model IV curve parameter	float	2.49480773653146E-06

**Resource:** Synthetic solar parameters denormalized ; **Filename:** modeloutput\_denormalized.csv

Column name (Metadata)	Description	Type	Value (Example)
id	progressive record identifier	integer	8
temperature_2m (°C)	temperature in Celsius	float	9.526443460583690
relative_humidity_2m (%)	relative humidity percentage	float	41.32391855120660
surface_pressure (hPa)	surface pressure in hPa	float	1012.223533195260
wind_speed_10m (m/s)	wind speed at 10 meters altitude in m/s	float	11.753147506713900
wind_speed_100m (m/s)	wind speed at 100 meters altitude in m/s	float	15.669119853973400
shortwave_radiation_instant (W/m <sup>2</sup> )	instantaneous shortwave solar radiation in W/m <sup>2</sup>	float	70.84285079687830
diffuse_radiation_instant (W/m <sup>2</sup> )	instantaneous diffuse solar radiation in W/m <sup>2</sup>	float	213.132576996088
direct_normal_irradiance_instant (W/m <sup>2</sup> )	instantaneous direct normal solar irradiance in W/m <sup>2</sup>	float	275.43683103323000
Mese	Month	text	January

**Resource:** Synthetic solar parameters Normalized ; **Filename:** modeloutput.csv

Column name (Metadata)	Description	Type	Value (Example)
id	progressive record identifier	integer	10
temperature_2m (°C)	normalized temperature in Celsius	float	0.455134

relative_humidity_2m (%)	normalized relative humidity percentage	float	0.263702
surface_pressure (hPa)	normalized surface pressure in hPa	float	0.180505
wind_speed_10m (m/s)	normalized wind speed at 10 meters altitude in m/s	float	0.651897
wind_speed_100m (m/s)	normalized wind speed at 100 meters altitude in m/s	float	0.967849
shortwave_radiation_instant (W/m <sup>2</sup> )	normalized instantaneous shortwave solar radiation in W/m <sup>2</sup>	float	0.391266
diffuse_radiation_instant (W/m <sup>2</sup> )	normalized instantaneous diffuse solar radiation in W/m <sup>2</sup>	float	0.610297
direct_normal_irradiance_instant (W/m <sup>2</sup> )	normalized instantaneous direct normal solar irradiance in W/m <sup>2</sup>	float	0.589351
Mese	Month	text	January