





IMPIANTO FV – PORTO TORRES AREE SUD (SS)

Impianto fotovoltaico di PORTO TORRES AREE SUD (SS)

Progetto Definitivo

CALCOLO PRODUCIBILITÀ DI IMPIANTO

CD-FE	00	07/07/2022	Emissione	M. Papapicco	S. Cesareo	D. Pomponio	V. CRISPU	G. TORE
Stato di Validità	Numero Revisione	Data	Descrizione	BFP	BFP	BFP	Eni New Energy	Eni Plenitude
Indice Revisione				Preparato	Verificato	Approvato	Verificato	Approvato
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Logo Appaltatore e Denominazione Commerciale  Studio Tecnico BFP S.r.l. Via degli Arredatori n°8 CAP 70132 - Modugno (BA)				ID Documento Appaltatore ---- Commessa n. 22160				
Nome d'Impianto e Oggetto IMPIANTO FV - PORTO TORRES AREE SUD PORTO TORRES (SS) – Progetto Definitivo						Scala n.a.	Numero di Pagine 1/18	
Titolo Documento Calcolo producibilità di impianto								

PVsyst - Simulation report

Grid-Connected System

Project: ENI Porto Torres

Variant: simulazione di producibilità

Tracking system with backtracking

System power: 50.59 MWp

Fiume Santo - Italia

Autore

STUDIO TECNICO BFP SRL (Italia)



Project: ENI Porto Torres

Variant: simulazione di producibilità

PVsyst V7.3.2

VCO, Simulation date:
24/02/23 13:42
with v7.3.2

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Project summary

Geographical Site

Fiume Santo
Italia

Situation

Latitude 40.82 °N
Longitude 8.33 °E
Altitude 27 m
Time zone UTC+1

Meteo data

Porto Torres SS
SolarGISv2.2.32 - TMY

Monthly albedo values

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
Albedo	0.15	0.16	0.17	0.17	0.17	0.17	0.17	0.17	0.16	0.16	0.14	0.15

System summary

Grid-Connected System

Simulation for year no 1

Tracking system with backtracking

PV Field Orientation

Orientation

Tracking plane, tilted axis
Avg axis tilt -0.6 °
Avg axis azim. 0 °

Tracking algorithm

Astronomic calculation
Backtracking activated

Near Shadings

According to strings
Electrical effect 100 %
Diffuse shading Automatic

System information

PV Array

Nb. of modules 93678 units
Pnom total 50.59 MWp

Inverters

Nb. of units 15 units
Pnom total 63.00 MWac
Pnom ratio 0.803

User's needs

Unlimited load (grid)

Results summary

Produced Energy	91285362 kWh/year	Specific production	1805 kWh/kWp/year	Perf. Ratio PR	86.72 %
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General parameters

Grid-Connected System

PV Field Orientation

Orientation

Tracking plane, tilted axis
Avg axis tilt -0.6 °
Avg axis azim. 0 °

Models used

Transposition Perez
Diffuse Imported
Circumsolar separate

Horizon

Average Height 1.0 °

Bifacial system

Model 2D Calculation
unlimited trackers

Bifacial model geometry

Tracker Spacing 9.50 m
Tracker width 4.86 m
GCR 51.1 %
Axis height above ground 2.50 m

Tracking system with backtracking

Tracking algorithm

Astronomic calculation
Backtracking activated

Near Shadings

According to strings
Electrical effect 100 %
Diffuse shading Automatic

Backtracking array

Nb. of trackers 1934 units

Sizes

Tracker Spacing 9.50 m
Collector width 4.86 m
Ground Cov. Ratio (GCR) 51.1 %
Phi min / max. -/+ 55.0 °

Backtracking strategy

Phi limits for BT -/+ 79.9 °
Backtracking pitch 9.50 m
Backtracking width 4.86 m

User's needs

Unlimited load (grid)

Bifacial model definitions

Ground albedo average 0.16
Bifaciality factor 70 %
Rear shading factor 5.0 %
Rear mismatch loss 10.0 %
Shed transparent fraction 0.0 %

Monthly ground albedo values

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Year
0.15	0.16	0.17	0.17	0.17	0.17	0.17	0.17	0.16	0.16	0.14	0.15	0.16

PV Array Characteristics

PV module

Manufacturer JA Solar
Model JAM72D30-540/MB
(Custom parameters definition)

Unit Nom. Power 540 Wp
Number of PV modules 93678 units
Nominal (STC) 50.59 MWp

Array #1 - PCU1.1

Number of PV modules 6734 units
Nominal (STC) 3636 kWp
Modules 259 Strings x 26 In series

Inverter

Manufacturer SMA
Model Sunny Central 4200 UP_1.4
(Custom parameters definition)

Unit Nom. Power 4200 kWac
Number of inverters 15 units
Total power 63000 kWac

Number of inverters 1 unit
Total power 4200 kWac



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PV Array Characteristics

Array #1 - PCU1.1

At operating cond. (50°C)

Pmpp	3343 kWp
U mpp	979 V
I mpp	3415 A

Operating voltage	921-1325 V
Pnom ratio (DC:AC)	0.87

Array #2 - PCU1.2

Number of PV modules	6734 units
Nominal (STC)	3636 kWp
Modules	259 Strings x 26 In series

Number of inverters	1 unit
Total power	4200 kWac

At operating cond. (50°C)

Pmpp	3343 kWp
U mpp	979 V
I mpp	3415 A

Operating voltage	921-1325 V
Pnom ratio (DC:AC)	0.87

Array #3 - PCU1.3

Number of PV modules	6734 units
Nominal (STC)	3636 kWp
Modules	259 Strings x 26 In series

Number of inverters	1 unit
Total power	4200 kWac

At operating cond. (50°C)

Pmpp	3343 kWp
U mpp	979 V
I mpp	3415 A

Operating voltage	921-1325 V
Pnom ratio (DC:AC)	0.87

Array #4 - PCU1.4

Number of PV modules	6708 units
Nominal (STC)	3622 kWp
Modules	258 Strings x 26 In series

Number of inverters	1 unit
Total power	4200 kWac

At operating cond. (50°C)

Pmpp	3330 kWp
U mpp	979 V
I mpp	3401 A

Operating voltage	921-1325 V
Pnom ratio (DC:AC)	0.86

Array #5 - PCU1.5

Number of PV modules	6708 units
Nominal (STC)	3622 kWp
Modules	258 Strings x 26 In series

Number of inverters	1 unit
Total power	4200 kWac

At operating cond. (50°C)

Pmpp	3330 kWp
U mpp	979 V
I mpp	3401 A

Operating voltage	921-1325 V
Pnom ratio (DC:AC)	0.86

Array #6 - PCU1.6

Number of PV modules	6708 units
Nominal (STC)	3622 kWp
Modules	258 Strings x 26 In series

Number of inverters	1 unit
Total power	4200 kWac

At operating cond. (50°C)

Pmpp	3330 kWp
U mpp	979 V
I mpp	3401 A

Operating voltage	921-1325 V
Pnom ratio (DC:AC)	0.86

Array #7 - PCU2.1

Number of PV modules	5564 units
Nominal (STC)	3005 kWp
Modules	214 Strings x 26 In series

Number of inverters	1 unit
Total power	4200 kWac



PV Array Characteristics

Array #7 - PCU2.1

At operating cond. (50°C)

Pmpp	2762 kWp
U mpp	979 V
I mpp	2821 A

Operating voltage	921-1325 V
Pnom ratio (DC:AC)	0.72

Array #8 - PCU2.2

Number of PV modules	5538 units
Nominal (STC)	2991 kWp
Modules	213 Strings x 26 In series

Number of inverters	1 unit
Total power	4200 kWac

At operating cond. (50°C)

Pmpp	2749 kWp
U mpp	979 V
I mpp	2808 A

Operating voltage	921-1325 V
Pnom ratio (DC:AC)	0.71

Array #9 - PCU2.3

Number of PV modules	5538 units
Nominal (STC)	2991 kWp
Modules	213 Strings x 26 In series

Number of inverters	1 unit
Total power	4200 kWac

At operating cond. (50°C)

Pmpp	2749 kWp
U mpp	979 V
I mpp	2808 A

Operating voltage	921-1325 V
Pnom ratio (DC:AC)	0.71

Array #10 - PCU2.4

Number of PV modules	5538 units
Nominal (STC)	2991 kWp
Modules	213 Strings x 26 In series

Number of inverters	1 unit
Total power	4200 kWac

At operating cond. (50°C)

Pmpp	2749 kWp
U mpp	979 V
I mpp	2808 A

Operating voltage	921-1325 V
Pnom ratio (DC:AC)	0.71

Array #11 - PCU2.5

Number of PV modules	5538 units
Nominal (STC)	2991 kWp
Modules	213 Strings x 26 In series

Number of inverters	1 unit
Total power	4200 kWac

At operating cond. (50°C)

Pmpp	2749 kWp
U mpp	979 V
I mpp	2808 A

Operating voltage	921-1325 V
Pnom ratio (DC:AC)	0.71

Array #12 - PCU2.6

Number of PV modules	5538 units
Nominal (STC)	2991 kWp
Modules	213 Strings x 26 In series

Number of inverters	1 unit
Total power	4200 kWac

At operating cond. (50°C)

Pmpp	2749 kWp
U mpp	979 V
I mpp	2808 A

Operating voltage	921-1325 V
Pnom ratio (DC:AC)	0.71

Array #13 - PCU2.7

Number of PV modules	5538 units
Nominal (STC)	2991 kWp
Modules	213 Strings x 26 In series

Number of inverters	1 unit
Total power	4200 kWac



PV Array Characteristics

Array #13 - PCU2.7			
At operating cond. (50°C)			
Pmpp	2749 kWp	Operating voltage	921-1325 V
U mpp	979 V	Pnom ratio (DC:AC)	0.71
I mpp	2808 A		
Array #14 - PCU2.8			
Number of PV modules	5538 units	Number of inverters	1 unit
Nominal (STC)	2991 kWp	Total power	4200 kWac
Modules	213 Strings x 26 In series		
At operating cond. (50°C)			
Pmpp	2749 kWp	Operating voltage	921-1325 V
U mpp	979 V	Pnom ratio (DC:AC)	0.71
I mpp	2808 A		
Array #15 - PCU3			
Number of PV modules	9022 units	Number of inverters	1 unit
Nominal (STC)	4872 kWp	Total power	4200 kWac
Modules	347 Strings x 26 In series		
At operating cond. (50°C)			
Pmpp	4479 kWp	Operating voltage	921-1325 V
U mpp	979 V	Pnom ratio (DC:AC)	1.16
I mpp	4575 A		
Total PV power		Total inverter power	
Nominal (STC)	50586 kWp	Total power	63000 kWac
Total	93678 modules	Number of inverters	15 units
Module area	241994 m ²	Pnom ratio	0.80
Cell area	222849 m ²		

Array losses

Array Soiling Losses		Thermal Loss factor		LID - Light Induced Degradation				
Loss Fraction	1.0 %	Module temperature according to irradiance		Loss Fraction	1.6 %			
		Uc (const)	29.0 W/m ² K					
		Uv (wind)	0.0 W/m ² K/m/s					
Module Quality Loss		Module mismatch losses		Strings Mismatch loss				
Loss Fraction	-0.2 %	Loss Fraction	1.0 % at MPP	Loss Fraction	0.1 %			
Module average degradation								
Year no	1							
Loss factor	0.45 %/year							
Mismatch due to degradation								
Imp RMS dispersion	0 %/year							
Vmp RMS dispersion	0 %/year							
IAM loss factor								
Incidence effect (IAM): User defined profile								
0°	40°	50°	60°	70°	75°	80°	85°	90°
1.000	1.000	0.996	0.992	0.958	0.917	0.847	0.710	0.000



Array losses

Spectral correction

FirstSolar model

Coefficient Set	C0	C1	C2	C3	C4	C5
Monocrystalline Si	0,85914	-0,02088	-0,0058853	0,12029	0,026814	-0,001781

DC wiring losses

Global wiring resistance 0.34 mΩ
Loss Fraction 1.5 % at STC

Array #1 - PCU1.1

Global array res. 4.7 mΩ
Loss Fraction 1.5 % at STC

Array #3 - PCU1.3

Global array res. 4.7 mΩ
Loss Fraction 1.5 % at STC

Array #5 - PCU1.5

Global array res. 4.7 mΩ
Loss Fraction 1.5 % at STC

Array #7 - PCU2.1

Global array res. 5.7 mΩ
Loss Fraction 1.5 % at STC

Array #9 - PCU2.3

Global array res. 5.7 mΩ
Loss Fraction 1.5 % at STC

Array #11 - PCU2.5

Global array res. 5.7 mΩ
Loss Fraction 1.5 % at STC

Array #13 - PCU2.7

Global array res. 5.7 mΩ
Loss Fraction 1.5 % at STC

Array #15 - PCU3

Global array res. 3.5 mΩ
Loss Fraction 1.5 % at STC

Array #2 - PCU1.2

Global array res. 4.7 mΩ
Loss Fraction 1.5 % at STC

Array #4 - PCU1.4

Global array res. 4.7 mΩ
Loss Fraction 1.5 % at STC

Array #6 - PCU1.6

Global array res. 4.7 mΩ
Loss Fraction 1.5 % at STC

Array #8 - PCU2.2

Global array res. 5.7 mΩ
Loss Fraction 1.5 % at STC

Array #10 - PCU2.4

Global array res. 5.7 mΩ
Loss Fraction 1.5 % at STC

Array #12 - PCU2.6

Global array res. 5.7 mΩ
Loss Fraction 1.5 % at STC

Array #14 - PCU2.8

Global array res. 5.7 mΩ
Loss Fraction 1.5 % at STC

System losses

Auxiliaries loss

Proportionnal to Power 5.0 W/kW
0.0 kW from Power thresh.

AC wiring losses

Inv. output line up to MV transfo

Inverter voltage 630 Vac tri
Loss Fraction 0.07 % at STC

Inverter: Sunny Central 4200 UP_1.4

Wire section (1 Inv.) Alu 1 x 3 x 3000 mm²
Wires length 10 m

Inverter: Sunny Central 4200 UP_1.4

Wire section (14 Inv.) Alu 14 x 3 x 4000 mm²
Average wires length 10 m



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AC wiring losses

MV line up to HV Transfo

MV Voltage 36 kV
Average loss Fraction 0.10 % at STC

Array #1 - PCU1.1

Wires Alu 3 x 95 mm²
Length 1123 m

Array #3 - PCU1.3

Wires Alu 3 x 95 mm²
Length 1230 m

Array #5 - PCU1.5

Wires Alu 3 x 95 mm²
Length 661 m

Array #7 - PCU2.1

Wires Alu 3 x 95 mm²
Length 2323 m

Array #9 - PCU2.3

Wires Alu 3 x 95 mm²
Length 1860 m

Array #11 - PCU2.5

Wires Alu 3 x 95 mm²
Length 1228 m

Array #13 - PCU2.7

Wires Alu 3 x 95 mm²
Length 506 m

Array #15 - PCU3

Wires Alu 3 x 95 mm²
Length 2094 m

HV line up to Injection

HV line voltage 36 kV
Wires Alu 3 x 1000 mm²
Length 3910 m
Loss Fraction 0.47 % at STC

Array #2 - PCU1.2

Wires Alu 3 x 95 mm²
Length 1109 m

Array #4 - PCU1.4

Wires Alu 3 x 95 mm²
Length 661 m

Array #6 - PCU1.6

Wires Alu 3 x 95 mm²
Length 230 m

Array #8 - PCU2.2

Wires Alu 3 x 95 mm²
Length 2193 m

Array #10 - PCU2.4

Wires Alu 3 x 95 mm²
Length 1525 m

Array #12 - PCU2.6

Wires Alu 3 x 95 mm²
Length 946 m

Array #14 - PCU2.8

Wires Alu 3 x 95 mm²
Length 204 m

AC losses in transformers

MV transfo

Medium voltage 36 kV
One transfo in each sub-array

Array #1 - PCU1.1

Transformer parameters

Nominal power at STC 3.58 MVA
Iron Loss (24/24 Connexion) 3.58 kVA
Iron loss fraction 0.10 % at STC
Copper loss 32.90 kVA
Copper loss fraction 0.92 % at STC
Coils equivalent resistance 3 x 1.02 mΩ

Array #2 - PCU1.2

Transformer parameters

Nominal power at STC 3.58 MVA
Iron Loss (24/24 Connexion) 3.58 kVA
Iron loss fraction 0.10 % at STC
Copper loss 32.90 kVA
Copper loss fraction 0.92 % at STC
Coils equivalent resistance 3 x 1.02 mΩ



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AC losses in transformers

MV transfo

Medium voltage 36 kV

One transfo in each sub-array

Array #3 - PCU1.3

Transformer parameters

Nominal power at STC 3.58 MVA
Iron Loss (24/24 Connexion) 3.58 kVA
Iron loss fraction 0.10 % at STC
Copper loss 32.90 kVA
Copper loss fraction 0.92 % at STC
Coils equivalent resistance 3 x 1.02 mΩ

Array #4 - PCU1.4

Transformer parameters

Nominal power at STC 3.56 MVA
Iron Loss (24/24 Connexion) 3.56 kVA
Iron loss fraction 0.10 % at STC
Copper loss 32.77 kVA
Copper loss fraction 0.92 % at STC
Coils equivalent resistance 3 x 1.03 mΩ

Array #5 - PCU1.5

Transformer parameters

Nominal power at STC 3.56 MVA
Iron Loss (24/24 Connexion) 3.56 kVA
Iron loss fraction 0.10 % at STC
Copper loss 32.77 kVA
Copper loss fraction 0.92 % at STC
Coils equivalent resistance 3 x 1.03 mΩ

Array #6 - PCU1.6

Transformer parameters

Nominal power at STC 3.56 MVA
Iron Loss (24/24 Connexion) 3.56 kVA
Iron loss fraction 0.10 % at STC
Copper loss 32.77 kVA
Copper loss fraction 0.92 % at STC
Coils equivalent resistance 3 x 1.03 mΩ

Array #7 - PCU2.1

Transformer parameters

Nominal power at STC 2.96 MVA
Iron Loss (24/24 Connexion) 2.96 kVA
Iron loss fraction 0.10 % at STC
Copper loss 27.22 kVA
Copper loss fraction 0.92 % at STC
Coils equivalent resistance 3 x 1.23 mΩ

Array #8 - PCU2.2

Transformer parameters

Nominal power at STC 2.95 MVA
Iron Loss (24/24 Connexion) 2.95 kVA
Iron loss fraction 0.10 % at STC
Copper loss 27.09 kVA
Copper loss fraction 0.92 % at STC
Coils equivalent resistance 3 x 1.24 mΩ



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AC losses in transformers

MV transfo

Medium voltage 36 kV

One transfo in each sub-array

Array #9 - PCU2.3

Transformer parameters

Nominal power at STC 2.95 MVA
Iron Loss (24/24 Connexion) 2.95 kVA
Iron loss fraction 0.10 % at STC
Copper loss 27.09 kVA
Copper loss fraction 0.92 % at STC
Coils equivalent resistance 3 x 1.24 mΩ

Array #10 - PCU2.4

Transformer parameters

Nominal power at STC 2.95 MVA
Iron Loss (24/24 Connexion) 2.95 kVA
Iron loss fraction 0.10 % at STC
Copper loss 27.09 kVA
Copper loss fraction 0.92 % at STC
Coils equivalent resistance 3 x 1.24 mΩ

Array #11 - PCU2.5

Transformer parameters

Nominal power at STC 2.95 MVA
Iron Loss (24/24 Connexion) 2.95 kVA
Iron loss fraction 0.10 % at STC
Copper loss 27.09 kVA
Copper loss fraction 0.92 % at STC
Coils equivalent resistance 3 x 1.24 mΩ

Array #12 - PCU2.6

Transformer parameters

Nominal power at STC 2.95 MVA
Iron Loss (24/24 Connexion) 2.95 kVA
Iron loss fraction 0.10 % at STC
Copper loss 27.09 kVA
Copper loss fraction 0.92 % at STC
Coils equivalent resistance 3 x 1.24 mΩ

Array #13 - PCU2.7

Transformer parameters

Nominal power at STC 2.95 MVA
Iron Loss (24/24 Connexion) 2.95 kVA
Iron loss fraction 0.10 % at STC
Copper loss 27.09 kVA
Copper loss fraction 0.92 % at STC
Coils equivalent resistance 3 x 1.24 mΩ

Array #14 - PCU2.8

Transformer parameters

Nominal power at STC 2.95 MVA
Iron Loss (24/24 Connexion) 2.95 kVA
Iron loss fraction 0.10 % at STC
Copper loss 27.09 kVA
Copper loss fraction 0.92 % at STC
Coils equivalent resistance 3 x 1.24 mΩ



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AC losses in transformers

MV transfo

Medium voltage 36 kV

One transfo in each sub-array

Array #15 - PCU3

Transformer parameters

Nominal power at STC 4.78 MVA

Iron Loss (24/24 Connexion) 4.78 kVA

Iron loss fraction 0.10 % at STC

Copper loss 43.98 kVA

Copper loss fraction 0.92 % at STC

Coils equivalent resistance 3 x 0.76 mΩ

HV transfo

Grid voltage 36 kV

Transformer from Datasheets

Nominal power 63000 kVA

Iron Loss (24/24 Connexion) 1.00 kVA

Iron loss fraction 0.00 % of PNom

Copper loss 1.00 kVA

Copper loss fraction 0.00 % at PNom

Coils equivalent resistance 3 x 0.33 mΩ



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Horizon definition

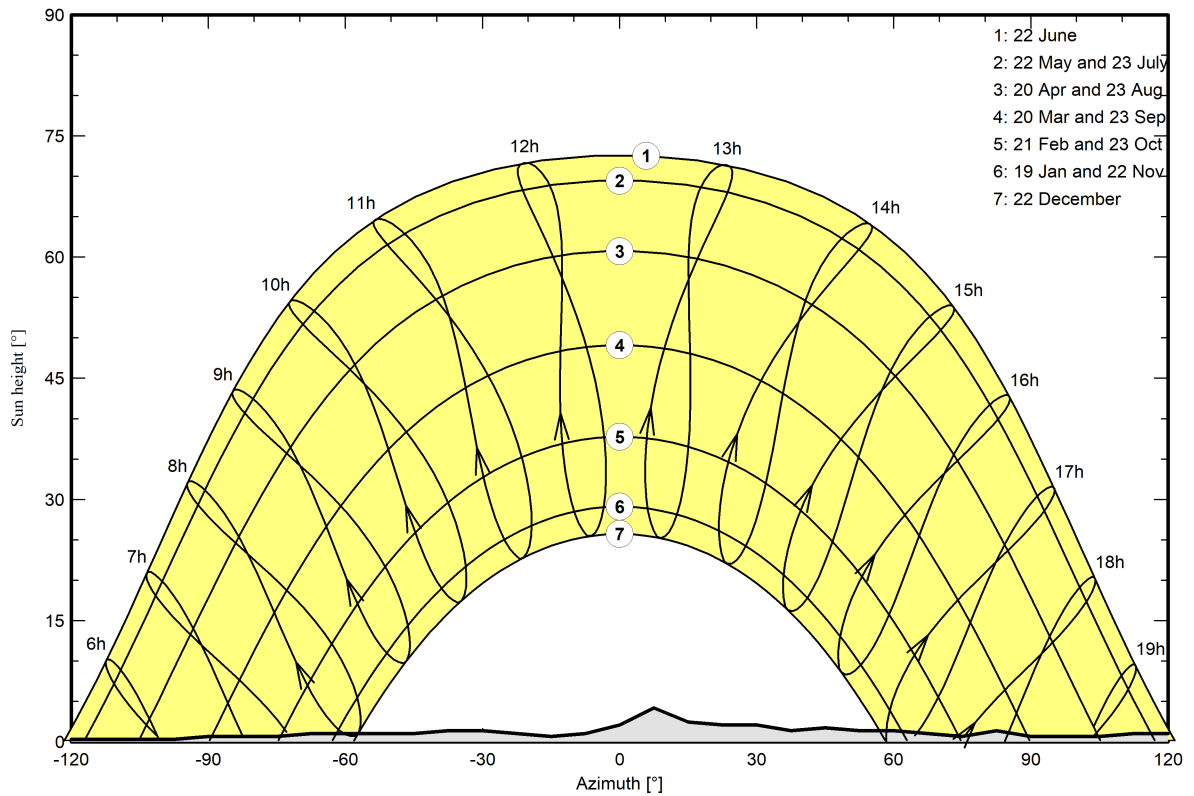
File CSV orizzonte, lat:40.81755277777784, lng:8.332527777777777, exported by s

Average Height	1.0 °	Albedo Factor	0.95
Diffuse Factor	0.99	Albedo Fraction	100 %

Horizon profile

Azimuth [°]	-180	-173	-165	-98	-90	-75	-68	-45	-38	-30	-23
Height [°]	0.7	0.7	0.4	0.4	0.7	0.7	1.1	1.1	1.4	1.4	1.1
Azimuth [°]	-15	-8	0	8	15	23	30	38	45	53	60
Height [°]	0.7	1.1	2.1	4.2	2.5	2.1	2.1	1.4	1.8	1.4	1.4
Azimuth [°]	68	75	83	90	105	113	120	128	173		
Height [°]	1.1	0.7	1.4	0.7	0.7	1.1	1.1	0.7	0.7		

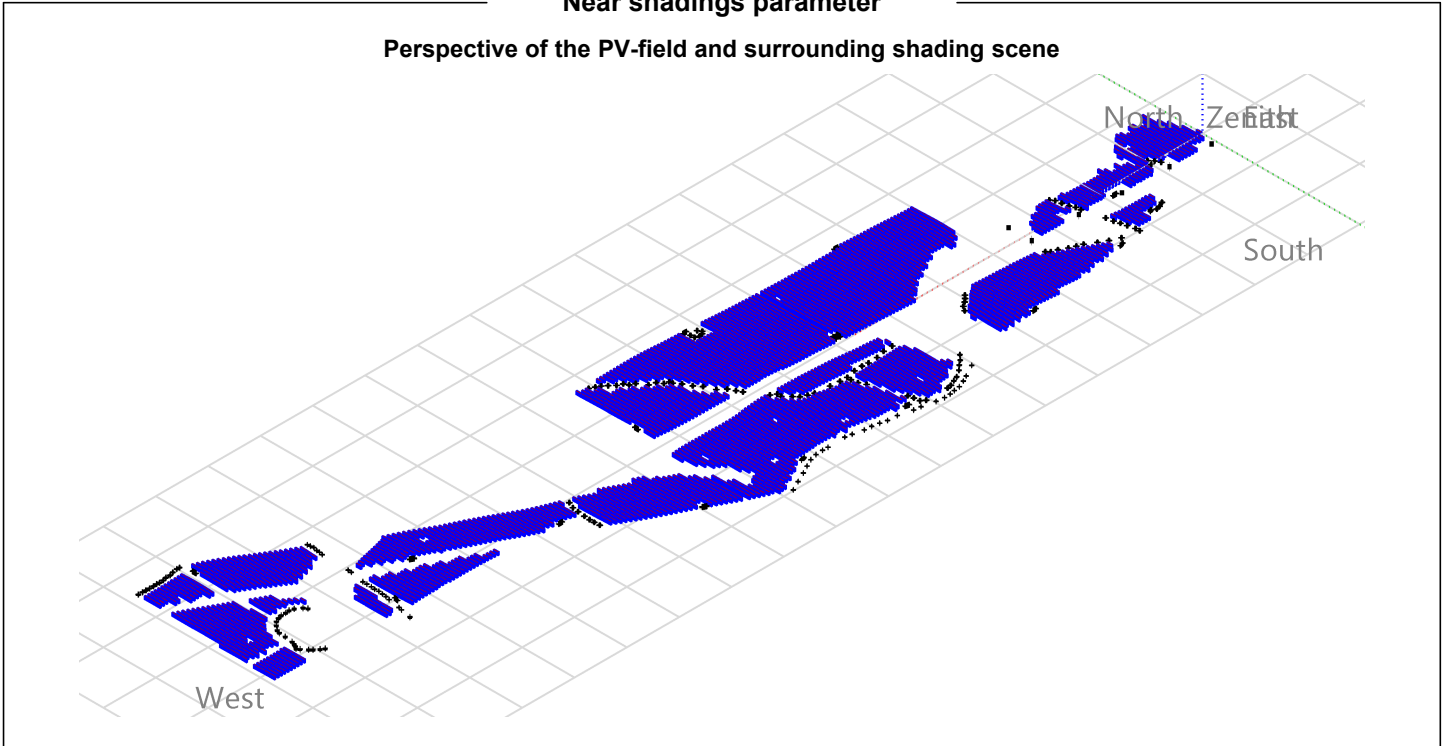
Sun Paths (Height / Azimuth diagram)





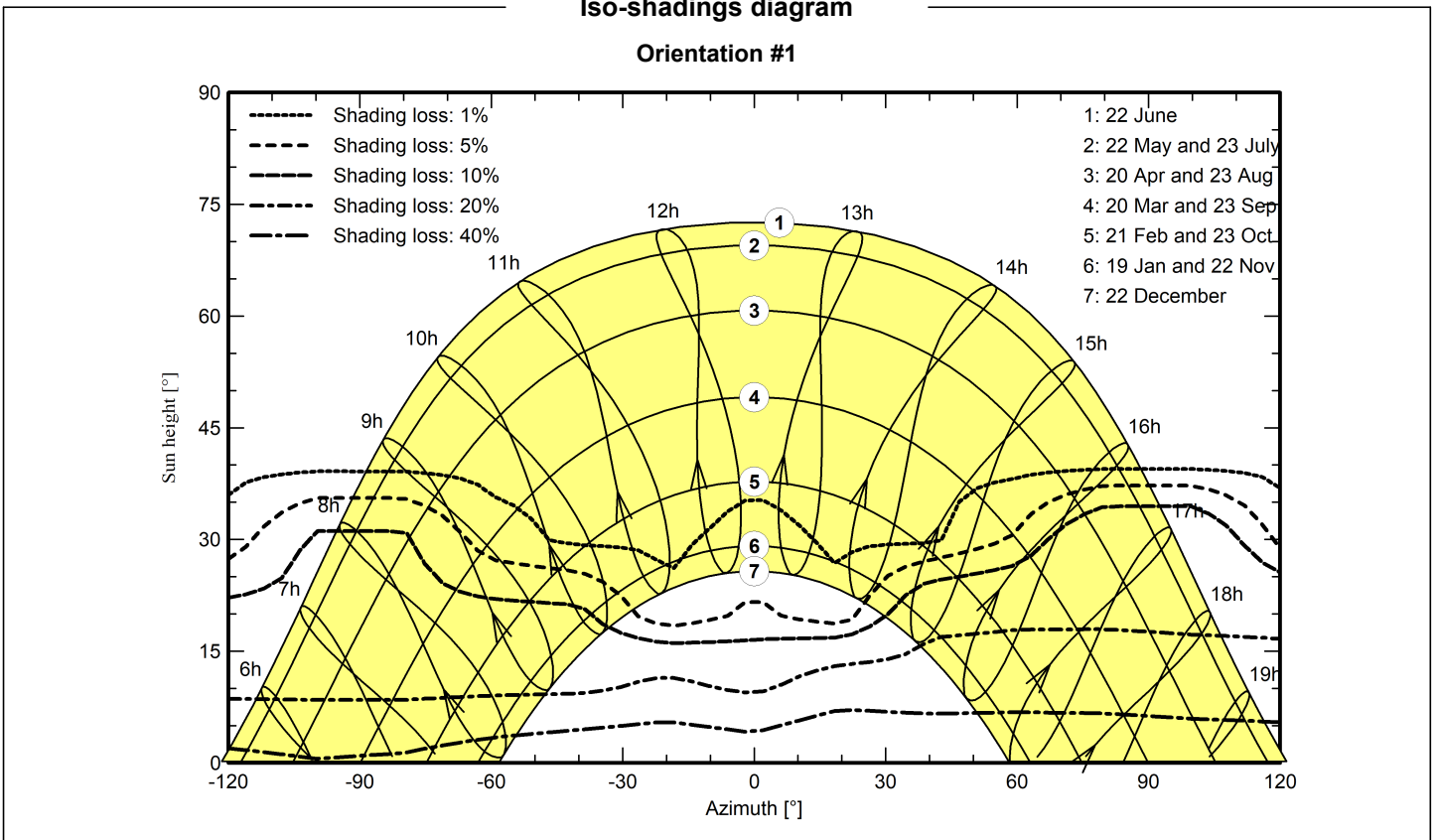
Near shadings parameter

Perspective of the PV-field and surrounding shading scene



Iso-shadings diagram

Orientation #1





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STUDIO TECNICO BFP SRL (Italia)

Main results

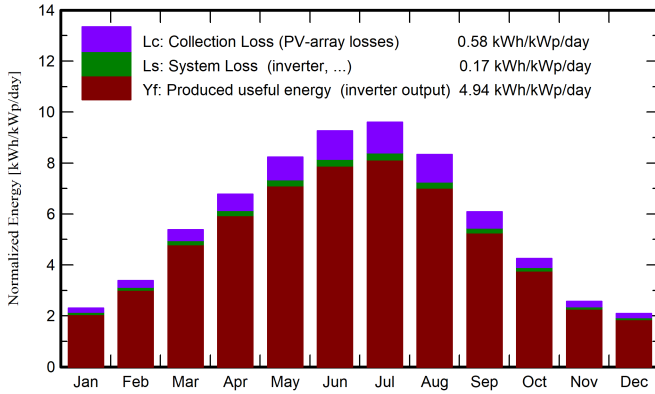
System Production

Produced Energy 91285362 kWh/year

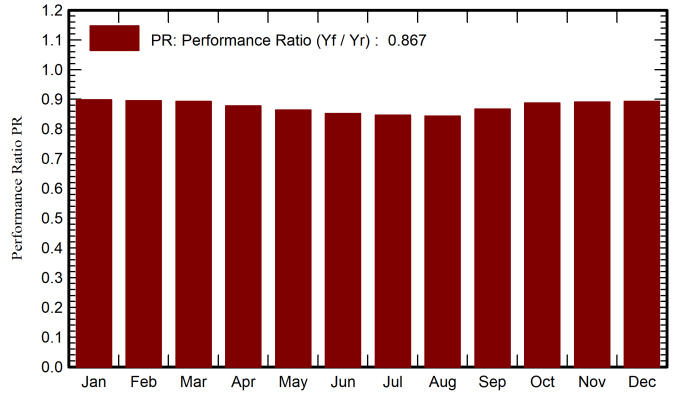
Specific production
 Performance Ratio PR

1805 kWh/kWp/year
 86.72 %

Normalized productions (per installed kWp)



Performance Ratio PR



Balances and main results

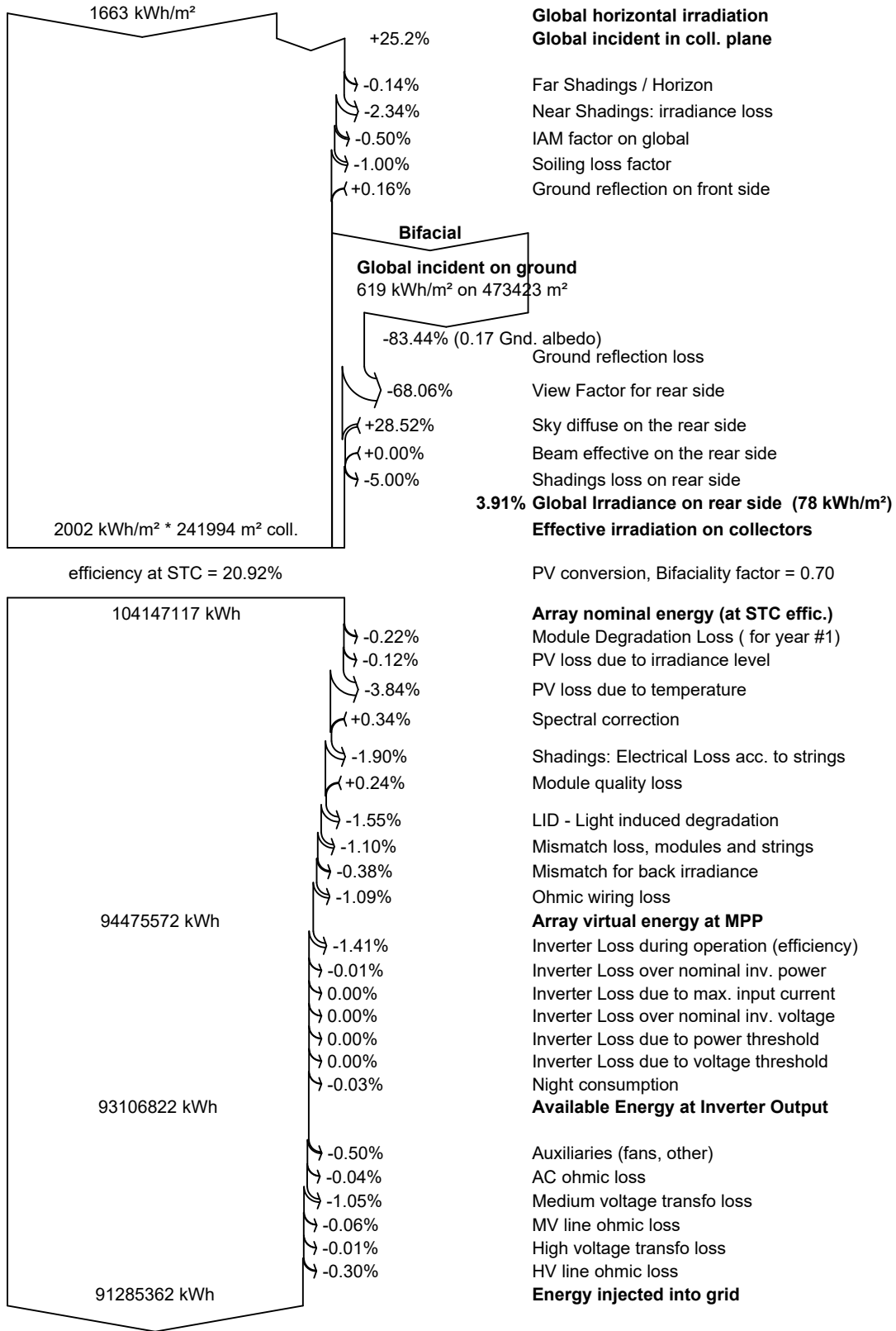
	GlobHor kWh/m ²	DiffHor kWh/m ²	T_Amb °C	GlobInc kWh/m ²	GlobEff kWh/m ²	EArray kWh	E_Grid kWh	PR ratio
January	57.7	28.48	10.96	71.5	67.5	3376182	3249129	0.899
February	75.7	35.15	12.50	94.7	90.2	4442045	4286561	0.895
March	134.2	54.45	13.35	166.7	160.4	7788506	7526669	0.893
April	164.7	68.09	14.94	203.1	195.8	9333987	9021173	0.878
May	205.5	78.06	17.82	255.2	246.5	11536883	11151727	0.864
June	220.1	71.88	21.22	277.9	268.7	12384439	11973750	0.852
July	236.0	70.65	22.65	297.5	288.1	13188704	12749084	0.847
August	203.7	68.00	24.79	258.3	249.5	11388844	11016727	0.843
September	145.5	58.02	22.36	182.4	175.8	8274694	8004649	0.868
October	105.4	47.57	19.47	131.9	126.3	6125732	5923865	0.888
November	62.2	31.15	14.68	76.9	72.9	3593129	3462201	0.890
December	52.0	26.56	12.07	64.7	60.7	3036821	2919825	0.893
Year	1662.6	638.06	17.26	2080.8	2002.1	94469967	91285362	0.867

Legends

- GlobHor Global horizontal irradiation
- DiffHor Horizontal diffuse irradiation
- T_Amb Ambient Temperature
- GlobInc Global incident in coll. plane
- GlobEff Effective Global, corr. for IAM and shadings
- EArray Effective energy at the output of the array
- E_Grid Energy injected into grid
- PR Performance Ratio



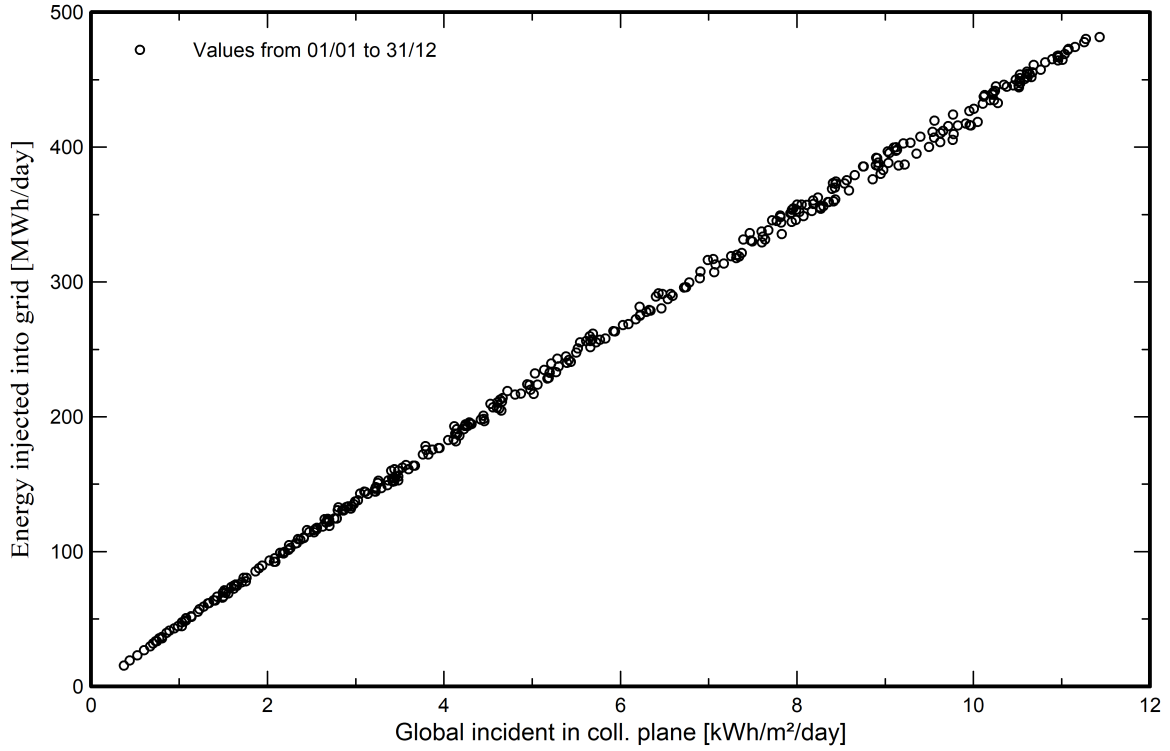
Loss diagram



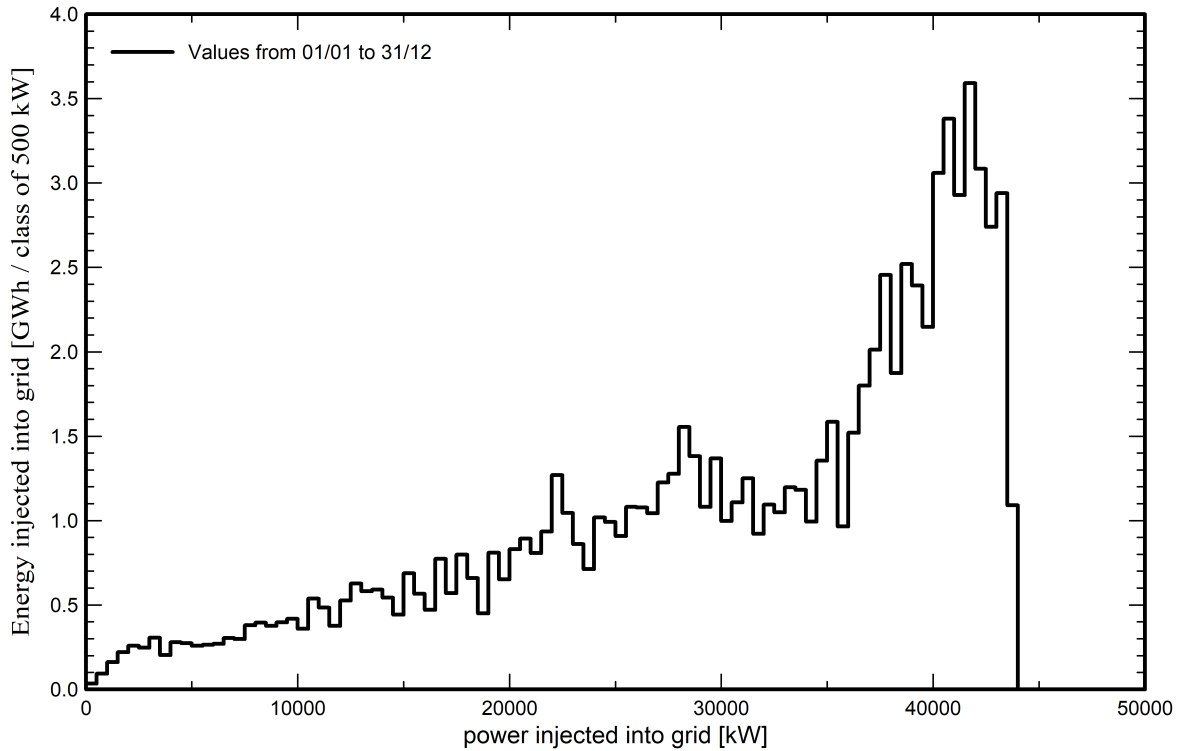


Predef. graphs

Diagramma giornaliero entrata/uscita



Distribuzione potenza in uscita sistema

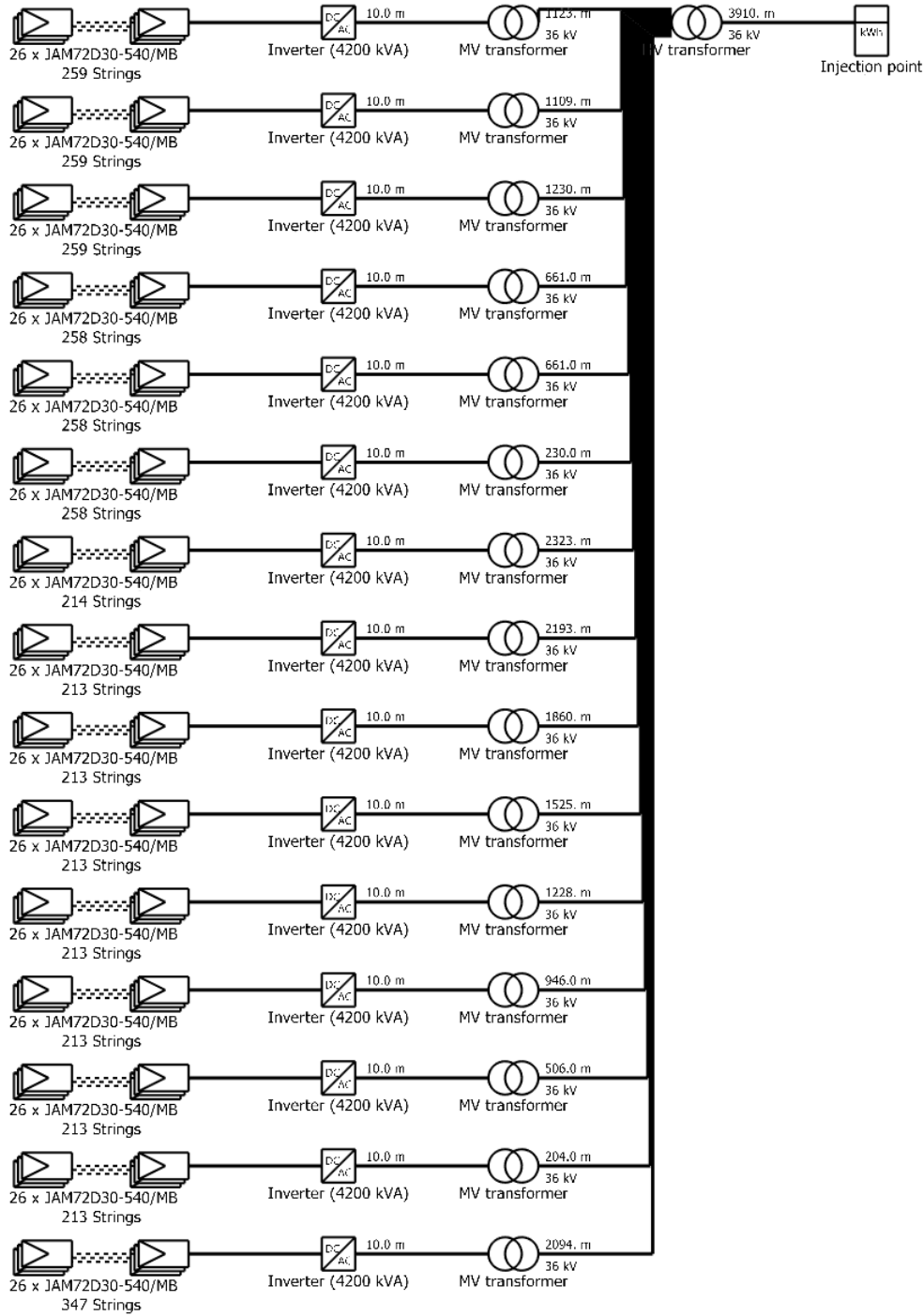




Single-line diagram

PVsyst V7.3.2

VCO, Simulation date:
24/02/23 13:42
with v7.3.2



PV module	JAM72D30-540/MB
Inverter	Sunny Central 4200 UP_1.4
String	26 x JAM72D30-540/MB

ENI Porto Torres

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VCO : simulazione di producibilità

24/02/23