

- 1. LEGENDA**
- ☐ DORSALE QUADRO\_01
  - ☐ DORSALE QUADRO\_02
  - ☐ DORSALE QUADRO\_03
  - ☐ DORSALE QUADRO\_04
  - ☐ DORSALE QUADRO\_05
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  - ☐ DORSALE QUADRO\_35
  - ☐ DORSALE QUADRO\_36

**CABLING CALCULATION: "Cerignola"**

MODULE DATA SHEET		GP - Inverter Electrical Characteristics		Voltage drop from Strings to GPS	
MODULE TYPE	SEC 56W / RECERSE 5L4	DC CUT	1381.62 V	Medium for each string	25.00
Peak Power (Pm)	(Wp)	575.00	Characteristics at STC	Line per GP	16
Open Circuit Voltage (Voc)	(V)	52.20	Vs DCUT	1383.20 V	10.00
Optimum Operating Voltage (Vmp)	(V)	44.67	k	138.80 A	Strings per GP
Current (Imp)	(A)	12.88			Medium Length
Temperature Coefficients Voltage (β)		-0.261 V/W°C			Medium Resistance
Temperature Coefficients Current (α)		0.048 A/W°C			Section Line
					Voltage Drop at STC
					Voltage Drop at 60°C
					Voltage Drop at -10°C

CHARACTERISTICS FOR ONE STRING	
Modules for each 1	N° 20.00
Voltage	Vmp 1161.42
Current	A 12.88
Peak Power (Pm)	KWp 14.95

FINAL DATA	
String to Pn	N° 315
Power of all Strings	(KWp) 4702.25 KWp
Total Modules	N° 8150

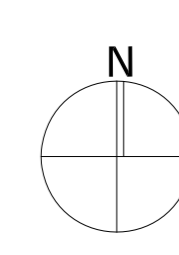
VALUES VERIFICATION FOR ONE GPS TO INVERTER		SMA - Sunny Central 4000EV	
Estimation of the minimum voltage Vmp	1206.14V	MIN MPPT VOLTAGE	849 V
Estimation of the maximum current Imp	131.27 A	MAX MPPT VOLTAGE	1325 Vdc
Estimation of the minimum current Imp	1161.42V		
Estimation of the maximum voltage Vdc	126.64 A		
Estimation of the minimum voltage Vdc	1242.81V	MAXIMUM VOLTAGE	1500 Vdc

CALCULATION OF THE VOLTAGE DROP ON THE CABLES STC						
CODE	N° OF STRINGS TO GPS	AREAS	MAXIMUM LENGTH	LINE SECTION	VOLTAGE DROP FROM GP TO INVERTER	TOTAL VOLTAGE DROP
SC 01	8	A.01	373.00	120	1.00	1.20
SC 02	8	A.02	426.00	150	0.87	1.10
SC 03	8	A.03	456.00	160	0.88	1.20
SC 04	8	A.04	456.00	160	0.85	1.00
SC 05	9	A.05	375.00	150	0.81	1.10
SC 06	7	A.06	345.00	120	0.80	1.00
SC 07	7	A.07	412.00	120	0.97	1.20
SC 08	9	A.08	345.00	150	0.85	1.00
SC 09	9	A.09	393.00	150	0.85	1.10
SC 10	9	A.10	393.00	150	0.88	1.10
SC 11	9	A.11	314.00	120	0.85	1.10
SC 12	7	A.12	291.00	95	0.83	1.00
SC 13	9	A.13	212.00	95	0.85	1.00
SC 14	9	A.14	291.00	120	0.85	1.00
SC 15	9	A.15	331.00	120	0.91	1.10
SC 16	9	A.16	331.00	120	0.91	1.10
SC 17	9	A.17	251.00	95	0.86	1.00
SC 18	9	A.18	220.00	95	0.84	1.00
SC 19	9	A.19	151.00	75	0.78	1.00
SC 20	9	A.20	189.00	70	0.88	1.20
SC 21	9	A.21	220.00	95	0.82	1.10
SC 22	9	A.22	271.00	100	0.82	1.00
SC 23	9	A.23	240.00	95	0.82	1.10
SC 24	9	A.24	191.00	70	0.89	1.20
SC 25	9	A.25	150.00	60	0.87	1.10
SC 26	9	A.26	90.00	35	0.83	1.10
SC 27	9	A.27	160.00	70	0.83	1.00
SC 28	9	A.28	209.00	85	0.89	1.00
SC 29	9	A.29	175.00	70	0.82	1.10
SC 30	9	A.30	129.00	50	0.93	1.10
SC 31	9	A.31	99.00	35	1.00	1.20
SC 32	8	A.32	69.00	25	0.85	1.00
SC 33	9	A.33	51.00	25	0.74	0.80
SC 34	9	A.34	80.00	35	0.85	1.00
SC 35	9	A.35	113.00	50	0.82	1.00
SC 36	9	A.36	144.00	70	0.75	0.90

MEDIAN VALOR	1.883 %
MINIMUM VALOR	1.000 %
MAXIMUM VALOR	1.280 %



CERIGNOLA REGIONE PUGLIA PROVINCIA DI FOGGIA

**IMPIANTO AGRIVOLTAICO E RELATIVE OPERE ED INFRASTRUTTURE CONNESSE DELLA POTENZA ELETTRICA DI 140,66 MW (ex 120MW) SITO NEL COMUNE DI CERIGNOLA**

PROGETTO DEFINITIVO

**Layout Campo "A1" - Sottocampo 6 - Dimensionamento delle dorsali-Tabella calcolo dorsali**

Proponente: **CERIGNOLA SOLAR 2 S.R.L.**  
Via Antonio Locatelli n.1  
37122 Verona  
P.IVA 04741630232  
cerignolasolar2@pec.it

Progettazione: **WH Group s.r.l.**  
Via A. Locatelli n. 1 - 37122 Verona (VR)  
P.IVA 12336131003  
ingegneria@enitgroup.eu

Spazio riservato agli Enti:

Rev.	Data	Descrizione	Redatto	Approvato
00	08/03/2022	V.I.A. Minorile	A. Tartaglia	S.M. Caputo

4.2.9\_2.43

Fil: PE17Q40\_EbbonoGrafico\_4.2.9\_2.43 Cod: PE17Q40 Scal: 1:500

CERIGNOLA SOLAR 2 S.R.L. Via Antonio Locatelli n.1 37122 Verona | cerignolasolar2@pec.it