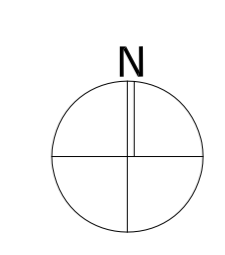


- 1. LEGENDA**
- ☐ DORSALE QUADRO\_01
  - ☐ DORSALE QUADRO\_02
  - ☐ DORSALE QUADRO\_03
  - ☐ DORSALE QUADRO\_04
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  - ☐ DORSALE QUADRO\_33
  - ☐ DORSALE QUADRO\_34
  - ☐ DORSALE QUADRO\_35
  - ☐ DORSALE QUADRO\_36

**CABLING CALCULATION: "Cerignola"**

MODULE DATA SHEET		GP - Inverter Electrical Characteristics		Voltage drop from Strings to GPS			
MODULE TYPE	SEC 50W / RECTIFIER 6.0	VA OUT1	1161.62 V	Modules for each string	25.00		
Peak Power (Pm)	(Wp)	575.00	Characteristics at STC	VA OUT2	1333.20 V		
Open Circuit Voltage (Voc)	(V)	53.20		VA OUT3	128.80 A		
Optimum Operating Voltage (Vmp)	(V)	44.67		String per GP	10.00		
Current (Imp)	(A)	12.88		Medium Length	4.45 m		
Temperature Coefficient Voltage (β)		-0.230 %/°C		Medium Resistance	0.1719 Ω		
Temperature Coefficient Current (α)		0.048 %/°C		Section Line	10 mm		
<b>CHARACTERISTICS FOR ONE STRING</b>							
Modules for each 1	N°	28.00		Voltage Drop at STC	0.19 %		
Voltage	Vmp0	1161.42		Voltage Drop at 65°C	0.17 %		
Current	A	12.88		Voltage Drop at -10°C	0.18 %		
Peak Power (Pm)	kWp	14.95					
<b>FINAL DATA</b>							
String to the	N°	315					
Power of all Strings	(Peak)	4769.25 kWp					
Total Modules	N°	8190					
GPS = Smart String Box							
<b>VALUES VERIFICATION FOR ONE GPS TO INVERTER</b>			SW: Sunny Central 6000EV				
Estimation of the minimum voltage Vmp0. For a temperature of the modules that are 65°C.	1298.14 V	MIN MPPT VOLTAGE	849 V				
Estimation of the maximum current Imp. For a temperature of the modules that are 65°C.	131.27 A						
Estimation of the maximum voltage Voc. For a temperature of the modules that are 65°C.	1161.62 V	MAX MPPT VOLTAGE	1323 Vdc				
Estimation of the minimum current Imp. For a temperature of the modules that are -10°C.	126.64 A						
Estimation of the maximum voltage Voc. For a temperature of the modules that are -10°C.	1242.81 V	MAXIMUM VOLTAGE	1500 Vdc				
<b>CALCULATION OF THE VOLTAGE DROP ON THE CABLES STC</b>							
CODE	N° OF STRINGS TO GPS	AREAS	MAXIMUM LENGTH	LINE SECTION	VOLTAGE DROP FROM GP TO INVERTER	TOTAL VOLTAGE DROP	NUMBER OF AREAS IN THE PV PLANT
SC 01	8	A.31	100.00	70	0.77	1.00	1
SC 02	8	A.32	99.00	25	0.85	1.00	2
SC 03	8	A.33	84.00	35	0.87	1.10	3
SC 04	8	A.34	129.00	50	0.83	1.00	4
SC 05	8	A.35	110.00	50	0.85	1.00	5
SC 06	8	A.36	86.00	35	0.92	1.10	6
SC 07	8	A.37	128.00	50	0.89	1.00	7
SC 08	8	A.38	189.00	70	0.86	1.10	8
SC 09	8	A.39	129.00	50	0.87	1.10	9
SC 10	8	A.10	146.00	70	0.76	1.00	10
SC 11	8	A.11	189.00	70	0.81	1.10	11
SC 12	8	A.12	177.00	70	0.82	1.10	12
SC 13	8	A.13	190.00	70	0.82	1.10	13
SC 14	8	A.14	181.00	85	0.75	0.90	14
SC 15	8	A.15	227.00	85	0.67	1.10	15
SC 16	8	A.16	181.00	75	0.88	1.10	16
SC 17	8	A.17	208.00	85	0.79	1.00	17
SC 18	8	A.18	249.00	85	0.68	1.10	18
SC 19	8	A.19	239.00	85	0.61	1.10	19
SC 20	8	A.20	211.00	85	0.67	1.10	20
SC 21	8	A.21	251.00	85	0.66	1.10	21
SC 22	8	A.22	288.00	100	0.67	1.10	22
SC 23	8	A.23	241.00	85	0.62	1.10	23
SC 24	8	A.24	270.00	100	0.67	1.10	24
SC 25	8	A.25	310.00	100	0.64	1.10	25
SC 26	8	A.26	301.00	100	0.61	1.10	26
SC 27	8	A.27	272.00	100	0.62	1.00	27
SC 28	8	A.28	318.00	120	0.68	1.10	28
SC 29	8	A.29	349.00	150	0.64	1.00	29
SC 30	8	A.30	368.00	150	0.61	1.10	30
SC 31	8	A.31	332.00	120	0.69	1.10	31
SC 32	7	A.32	371.00	120	0.67	1.10	32
SC 33	7	A.33	402.00	120	0.64	1.10	33
SC 34	7	A.34	363.00	120	0.65	1.00	34
SC 35	8	A.35	332.00	120	1.00	1.20	35
SC 36	8	A.36	379.00	150	0.92	1.10	36

MEDIUM VALOR	1,827 %
MINIMUM VALOR	0,900 %
MAXIMUM VALOR	1,288 %



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 4- 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  
ingegnera@enitgroup.eu

Spazio riservato agli Enti:

File: PE17Q00_Elaborazioni_4.2.9_2.29		Cod. PE17Q00		Scal. 1:500	
Rev.	Data	Descrizione	Redatto	Approvato	
00	08/03/2022	V.I.A. Minorile	A. Tartaglia	S.M. Caputo	
<b>4.2.9_2.29</b>					
CERIGNOLA SOLAR 2 S.R.L.   Via Antonio Locatelli n.1 37122 Verona   cerignolasolar2@pec.it					