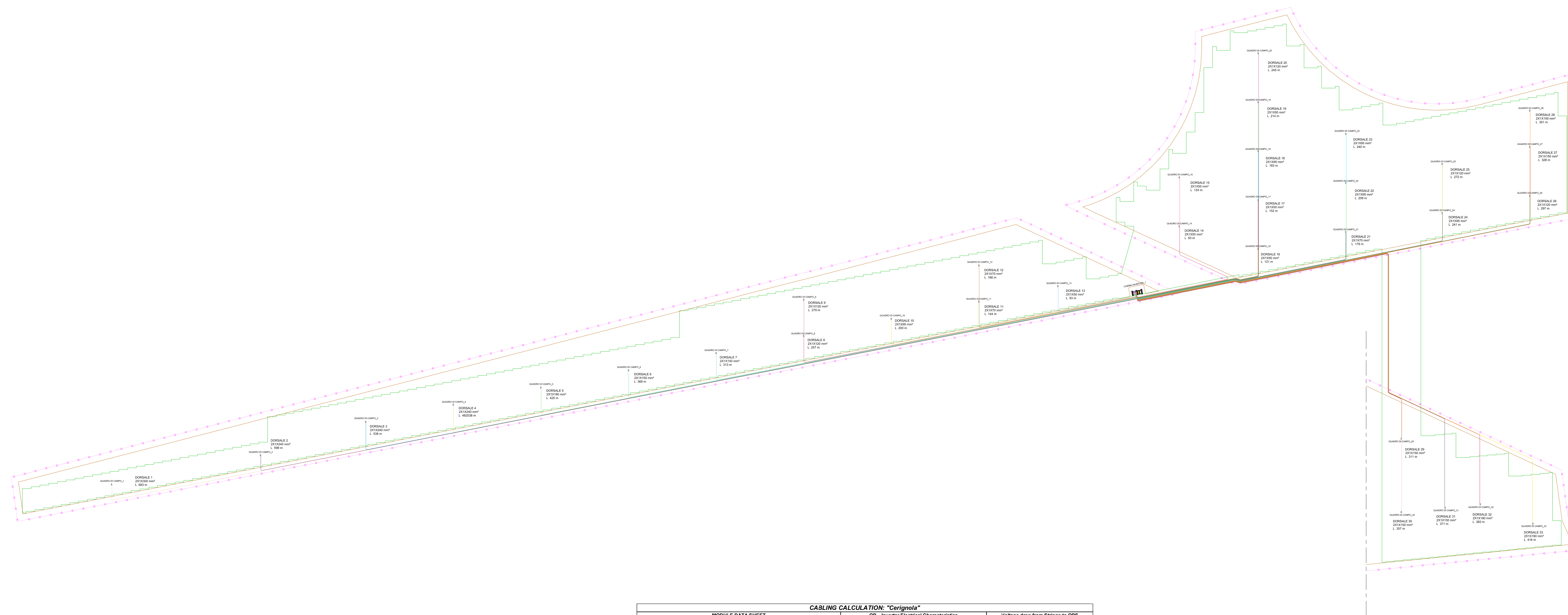


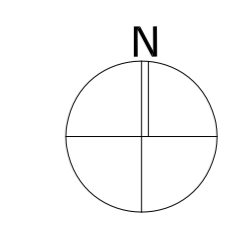
1. LEGENDA

- ☐ DORSALE QUADRO\_01
- ☐ DORSALE QUADRO\_02
- ☐ DORSALE QUADRO\_03
- ☐ DORSALE QUADRO\_04
- ☐ DORSALE QUADRO\_05
- ☐ DORSALE QUADRO\_06
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- ☐ DORSALE QUADRO\_32
- ☐ DORSALE QUADRO\_33



MODULE DATA SHEET		CABLING CALCULATION: "Cerignola"		QP - Inverter Electrical Characteristics		Voltage drop from Strings to QPS	
Module Type	REC Saw / REC4PPE REC	Characteristics at STC	U <sub>OC</sub> OUT	1161.42 V	Modules for each string	28.00	
Peak Power (P <sub>max</sub> )	(Wp)	575.00	V <sub>OC</sub> OUT	1285.20 V	Line per QP	10	
Open Circuit Voltage (V <sub>oc</sub> )	(V)	53.00	I <sub>OC</sub> OUT	128.80 A	Strings per QP	10.00	
Optimum Operating Voltage (V <sub>mp</sub> )	(V)	44.67			Medium Length	≤ 45 m	
Current (Imp)	(A)	12.88			Medium Resistance	0.1719 Ω	
Temperature Co-efficient Voltage (β)		-0.280 V/W°C			Section Line	10 mm <sup>2</sup>	
Temperature Co-efficient Current (α)		0.048 A/W°C			Voltage Drop at STC	0.19 %	
CHARACTERISTICS FOR ONE STRING					Voltage Drop at 60°C	0.17 %	
Modules for each 1	N°	28.00			Voltage Drop at -10°C	0.17 %	
Voltage	V <sub>mp</sub>	1161.42					
Current	A	12.88					
Peak Power (P <sub>max</sub> )	Wp	14.65					
FINAL DATA							
String to PV	N°	330					
Power of all Strings (P <sub>max</sub> )	(Wp)	4933.50 Wp					
Total Modules	N°	8580					
VALUES VERIFICATION FOR ONE QPS TO INVERTER		SMA Sunny Central 4000-EV					
Estimation of the minimum voltage V <sub>mp</sub> For a temperature of the modules that are 60°C	1281.50V	MIN MPPT VOLTAGE	848 V				
Estimation of the maximum current Imp For a temperature of the modules that are 60°C	131.27 A						
Estimation of the maximum input voltage V <sub>oc</sub> For a temperature of the modules that are STC	1161.42V	MAX MPPT VOLTAGE	1325 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 V <sub>oc</sub> For a temperature of the modules that are -10°C	1247.65V	MAXIMUM VOLTAGE	1500 Vdc				
CALCULATION OF THE VOLTAGE DROP ON THE CABLES STC							
CODE	N° OF STRINGS TO QPS	AREAS	MAXIMUM LENGTH	LINE SECTION	VOLTAGE DROP FROM QP TO INVERTER	TOTAL VOLTAGE DROP	NUMBER OF AREAS IN THE PV PLANT
SC-01	10	A-01	660.00	360	0.91	1.10	1
SC-02	10	A-02	660.00	240	0.98	1.20	1
SC-03	10	A-03	530.00	240	0.88	1.10	3
SC-04	10	A-04	420.00	240	0.79	1.00	4
SC-05	10	A-05	420.00	180	0.93	1.10	5
SC-06	10	A-06	260.00	120	0.87	1.00	6
SC-07	10	A-07	310.00	150	0.82	1.00	7
SC-08	10	A-08	260.00	120	0.85	0.95	8
SC-09	10	A-09	270.00	120	0.92	1.10	9
SC-10	10	A-10	200.00	90	0.83	1.00	10
SC-11	10	A-11	144.00	70	0.81	1.00	11
SC-12	10	A-12	150.00	70	0.84	1.10	12
SC-13	10	A-13	93.00	50	0.73	0.95	13
SC-14	10	A-14	93.00	50	0.73	0.95	14
SC-15	10	A-15	124.00	50	0.88	1.20	15
SC-16	10	A-16	124.00	50	0.85	1.10	16
SC-17	10	A-17	152.00	70	0.86	1.10	17
SC-18	10	A-18	152.00	70	0.76	1.10	18
SC-19	10	A-19	216.00	90	0.88	1.10	19
SC-20	10	A-20	216.00	120	0.89	1.20	20
SC-21	10	A-21	216.00	120	0.81	1.00	21
SC-22	10	A-22	208.00	90	0.87	1.10	22
SC-23	10	A-23	208.00	90	1.00	1.20	23
SC-24	10	A-24	241.00	90	1.00	1.20	24
SC-25	10	A-25	272.00	120	0.99	1.10	25
SC-26	10	A-26	292.00	120	0.88	1.20	26
SC-27	10	A-27	328.00	150	0.85	1.10	27
SC-28	10	A-28	351.00	150	0.92	1.10	28
SC-29	10	A-29	311.00	150	0.82	1.00	29
SC-30	10	A-30	307.00	150	0.84	1.10	30
SC-31	10	A-31	371.00	180	0.88	1.20	31
SC-32	10	A-32	363.00	180	0.84	1.00	32
SC-33	10	A-33	416.00	180	0.91	1.10	33
						0.20	33
						0.20	33
						0.20	33

MEDIUM VALUE	1.993 %
MINIMUM VALUE	0.800 %
MAXIMUM VALUE	1.200 %



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 "B" - Sottocampo I - Dimensionamento delle dorsali-Tabella calcolo dorsali**

Proponente: CERIGNOLA SOLAR 2 S.R.L. Via Antonio Locatelli n.1 37122 Verona P.IVA 04741630322 cerignolasolar2@pec.it

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

Spazio riservato agli Enti:

File: PE17Q0_EbberoGratico_4.2.9_4.8	Cod. PE17Q0	Scala 1:1100		
Rev.	Data	Descrizione	Redatto	Approvato
00	08/03/2022	V.I.A. Ministeriale	A. Tartaglia	S.M. Caputo
<b>4.2.9_4.8</b>				
CERIGNOLA SOLAR 2 S.R.L. Via Antonio Locatelli n.1 37122 Verona cerignolasolar2@pec.it				