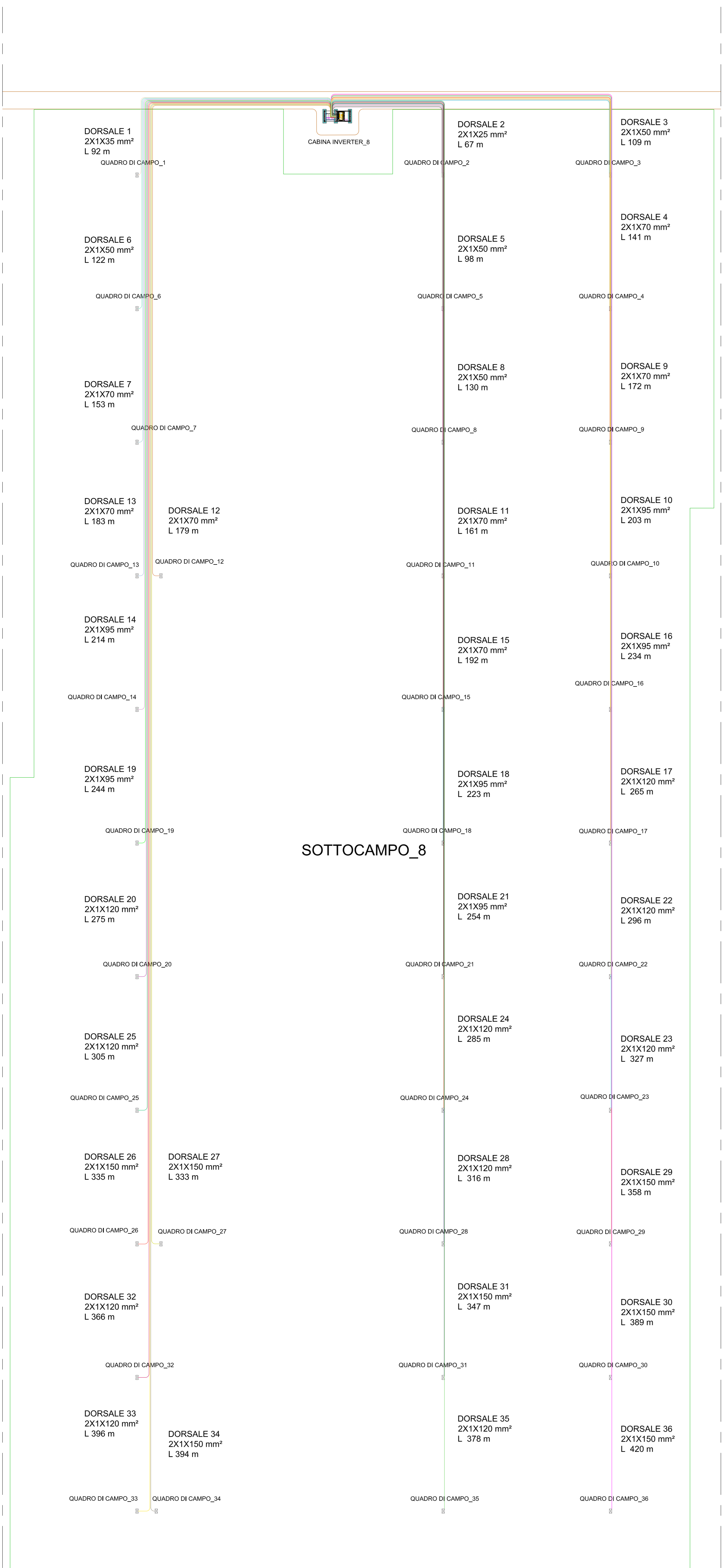


1. LEGENDA

- ☒ DORSALE QUADRO\_01
- ☒ DORSALE QUADRO\_02
- ☒ DORSALE QUADRO\_03
- ☒ DORSALE QUADRO\_04
- ☒ DORSALE QUADRO\_05
- ☒ DORSALE QUADRO\_06
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- ☒ DORSALE QUADRO\_35
- ☒ DORSALE QUADRO\_36



**CABLING CALCULATION: "Cerignola"**

MODULE DATA SHEET		QP - Inverter Electrical Characteristics		Voltage drop from Strings to QPS	
Module Type	SEC Solar RECORDER 6x6	DC OUT	1161.42 V	Modules for each string	25.00
Peak Power (Pm)	(Wp)	975.00	Characteristics at STC	Line per QP	1.0
Open Circuit Voltage (Voc)	(V)	53.00	Voc OUT	String per QP	10.00
Optimum Operating Voltage (Vmp)	(V)	44.67		Medium Length	≤ 45 m
Current (Imp)	(A)	12.88		Medium Resistance	0.1719 Ω
Temperature Co-efficient Voltage (β)		-0.290 V/V/°C		Section Line	10 mm²
Temperature Co-efficient Current (α)		0.048 A/V/°C		Voltage Drop at STC	0.19 %
<b>CHARACTERISTICS FOR ONE STRING</b>				Voltage Drop at 65°C	0.17 %
Modules for each 1	N°	25.00		Voltage Drop at -10°C	0.18 %
Voltage	Vmp	1161.42			
Current	A	12.88			
Peak Power (Pm)	kWp	14.95			
<b>FINAL DATA</b>					
String to In	N°	318			
Power of all Strings	(Peak)	4709.25 kWp			
Total Modules	N°	8190			

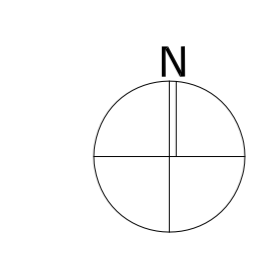
**VALUES VERIFICATION FOR ONE QPS TO INVERTER**

Estimation of the minimum voltage Vmp	1296.14V	MIN MPPT VOLTAGE	849 V
Estimation of the maximum current Imp	131.27 A		
Estimation of the maximum voltage Voc	1161.42V	MAX MPPT VOLTAGE	1325 Vdc
Estimation of the maximum current Imp	128.64 A		
Estimation of the maximum voltage Voc	1242.81V	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	8	A 01	372.00	120	1.00	1.20	1
SC 02	8	A 02	468.00	120	0.87	1.10	2
SC 03	8	A 03	468.00	150	0.68	1.00	3
SC 04	8	A 04	468.00	150	0.65	1.00	4
SC 05	7	A 05	342.00	120	0.81	1.10	5
SC 06	7	A 06	342.00	120	0.80	1.00	6
SC 07	7	A 07	412.00	120	0.97	1.20	7
SC 08	6	A 08	342.00	150	0.63	1.00	8
SC 09	6	A 09	360.00	150	0.65	1.10	9
SC 10	6	A 10	360.00	150	0.68	1.10	10
SC 11	6	A 11	312.00	120	0.95	1.10	11
SC 12	7	A 12	261.00	90	0.83	1.00	12
SC 13	6	A 13	212.00	90	0.81	1.00	13
SC 14	6	A 14	261.00	120	0.65	1.00	14
SC 15	6	A 15	212.00	90	0.90	1.00	15
SC 16	6	A 16	301.00	120	0.91	1.10	16
SC 17	6	A 17	252.00	90	0.96	1.20	17
SC 18	6	A 18	210.00	90	0.84	1.00	18
SC 19	6	A 19	151.00	70	0.76	1.00	19
SC 20	6	A 20	189.00	70	0.88	1.20	20
SC 21	6	A 21	262.00	90	0.95	1.10	21
SC 22	6	A 22	271.00	150	0.62	1.00	22
SC 23	6	A 23	262.00	90	0.82	1.10	23
SC 24	6	A 24	191.00	70	0.99	1.20	24
SC 25	6	A 25	150.00	70	0.87	1.10	25
SC 26	6	A 26	90.00	35	0.93	1.10	26
SC 27	6	A 27	180.00	70	0.83	1.00	27
SC 28	6	A 28	299.00	90	0.80	1.00	28
SC 29	6	A 29	178.00	70	0.62	1.10	29
SC 30	6	A 30	159.00	50	0.93	1.10	30
SC 31	6	A 31	91.00	35	1.00	1.00	31
SC 32	6	A 32	99.00	35	0.85	1.00	32
SC 33	6	A 33	81.00	25	0.74	0.90	33
SC 34	6	A 34	82.00	35	0.85	1.00	34
SC 35	6	A 35	113.00	50	0.82	1.00	35
SC 36	6	A 36	144.00	70	0.75	0.90	36

MEAN VALUE	1.903 %
MINIMUM VALUE	1.000 %
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 "A1" - Sottocampo 8 - Dimensionamento delle dorsali-Tabella calcolo dorsali**

Proprietario: 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 ingegneris@enitgroup.eu



Spazio riservato agli Enti:

File: PE17Q00_ElaboratoGrafico_4.2.9_2.57	Cod. PE17Q00	Scala: 1:500
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Rev.	Data	Descrizione	Redatto	Approvato
00	08/03/2022	V.I.A. Preliminare	A. Tartaglia	S.M. Caputo

4.2.9\_2.57

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