



REGIONE
LAZIO

COMUNI DI : CELLERE (VT) E PIANSANO (VT)

Centrale Solare "Uliveto Agrivoltaico del Lazio" da 64.898,64 kWp



Proponente: **SKI 16 S.R.L.**

Via Caradosso N. 9 - 20123 Milano (MI)



Investitore agricolo
superintensivo :

OXY CAPITAL
ADVISORS

OXY CAPITAL ADVISORS S.R.L.

Via A. Bertani, 6 - 20154 Milano - Italia

Partner:

Titolo: Scheda tecnica inverter



progetto
verde
studio di architettura del paesaggio



AEDES GROUP
ENGINEERING

MADE
RINNOVABILI

N° Elaborato: 102

Cod: AD_15

Scala:

tipo di progetto:

- ☐ RILIEVO
☐ PRELIMINARE
☒ DEFINITIVO
☐ ESECUTIVO

Progetto dell'inserimento paesaggistico e mitigazione

Progettista:

Agr. Fabrizio Cembalo Sambiase
Arch. Alessandro Visalli

Collaboratori:

Agr. Rosa Verde
Arch. Anna Sirica
Urb. Enrico Borrelli
Urb. Daniela Marrone
Urb. Patrizia Ruggiero

Progettazione elettrica e civile

Progettista:

Ing. Rolando Roberto
Ing. Marco Balzano

Collaboratori:

Ing. Simone Bonacini
Ing. Giselle Roberto

Consulenza geologia

Geol. Gaetano Ciccarelli

Consulenza archeologia

Archeol. Concetta C.Costa

rev.	descrizione	data	formato	elaborato da	controllato da	approvato da
00	Consegna	Dicembre 2022	A4			
01						
02						
03						
04						

SG350HX

Multi-MPPT String Inverter for 1500 Vdc System



HIGH YIELD

- Up to 16 MPPTs with max. efficiency 99%
- 20A per string, compatible with 500Wp+ module
- Data exchange with tracker system, improving yield



LOW COST

- Q at night function, save investment
- Power line communication (PLC)
- Smart IV Curve diagnosis, active O&M



GRID SUPPORT

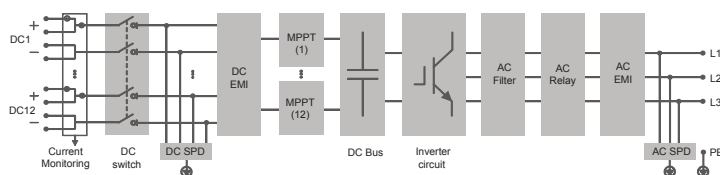
- $SCR \geq 1.15$ stable operation in extremely weak grid
- Reactive power response time <30ms
- Compliant with global grid code



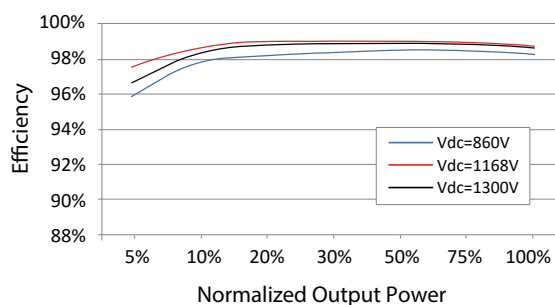
PROVEN SAFETY

- 2 strings per MPPT, no fear of string reverse connection
- Integrated DC switch, automatically cut off the fault
- 24h real-time AC and DC insulation monitoring

CIRCUIT DIAGRAM



EFFICIENCY CURVE



Type designation	SG350HX
Input (DC)	
Max. PV input voltage	1500 V
Min. PV input voltage / Startup input voltage	500 V / 550 V
Nominal PV input voltage	1080 V
MPP voltage range	500 V – 1500 V
No. of independent MPP inputs	12 (optional: 16)
Max. number of input connector per MPPT	2
Max. PV input current	12 * 40 A (Optional: 16 * 30 A)
Max. DC short-circuit current per MPPT	60 A
Output (AC)	
AC output power	352 kVA @ 30°C / 320 kVA @40 °C / 295 kVA @50°C
Max. AC output current	254 A
Nominal AC voltage	3 / PE, 800 V
AC voltage range	640 – 920V
Nominal grid frequency / Grid frequency range	50 Hz / 45 – 55 Hz, 60 Hz / 55 – 65 Hz
THD	< 3 % (at nominal power)
DC current injection	< 0.5 % In
Power factor at nominal power / Adjustable power factor	> 0.99 / 0.8 leading – 0.8 lagging
Feed-in phases / Connection phases	3 / 3
Efficiency	
Max. efficiency / European efficiency	99.02 % / 98.8 %
Protection	
DC reverse connection protection	Yes
AC short circuit protection	Yes
Leakage current protection	Yes
Grid monitoring	Yes
Ground fault monitoring	Yes
DC switch / AC switch	Yes / No
PV string current monitoring	Yes
Q at night function	Yes
Anti-PID and PID recovery function	Optional
Surge protection	DC Type II / AC Type II
General Data	
Dimensions (W*H*D)	1136 * 870 * 361 mm
Weight*	≤116 kg
Isolation method	Transformerless
Degree of protection	IP66
Power consumption at night	< 6 W
Operating ambient temperature range	-30 to 60°C
Allowable relative humidity range	0 – 100 %
Cooling method	Smart forced air cooling
Max. operating altitude	4000 m (> 3000 m derating)
Display	LED, Bluetooth+APP
Communication	RS485 / PLC
DC connection type	MC4-Evo2 (Max. 6 mm ² , optional 10mm ²)
AC connection type	Support OT/DT terminal (Max. 400 mm ²)
Compliance	IEC 62109, IEC 61727, IEC 62116, IEC 60068, IEC 61683, VDE-AR-N 4110:2018, VDE-AR-N 4120:2018, EN 50549-1/2, UNE 206007-1:2013, P.O.12.3, UTE C15-712-1:2013
Grid Support	Q at night function, LVRT, HVRT, active & reactive power control and power ramp rate control, Q-U control, P-f control

*Due to the multi-supplier for some key components, the actual weight may have a ±8% deviation, please refer to the actually delivered product.