

COMUNI DI:  
SIAMAGGIORE  
SOLARUSSA

PROVINCIA: ORISTANO  
REGIONE: SARDEGNA

"FATTORIA SOLARE SIAMAGGIORE 1"  
AGRIVOLTAICO DI TIPO ELEVATO E AVANZATO

**PROGETTO DEFINITIVO**

**SCHEMA TECNICA INVERTER**

| Tipo Elaborato | Codice Elaborato | Data       | Scala CAD | Formato | Foglio / di | Scala |
|----------------|------------------|------------|-----------|---------|-------------|-------|
| TAV.           | 2102_T.P.25      | 05/04/2023 | -         | A4      | 1/3         | -     |

**PROPONENTE**

**EF AGRI Società Agricola A R.L.**  
Via del Brennero, 111  
38121 - Trento (TN)

**SVILUPPO**



**SET SVILUPPO s.r.l.**  
Corso Trieste, 19  
00198 - Roma (RM)

**PROGETTAZIONE**

Ing. Giacomo Greco



Ing. Marco Marsico



| Rev. | Data       | Descrizione     | Redatto         | Verificato    | Approvato       |
|------|------------|-----------------|-----------------|---------------|-----------------|
| 00   | 05/04/2023 | Prima Emissione | Ing. M. Marsico | Ing. G. Greco | Ing. M. Marsico |
|      |            |                 |                 |               |                 |
|      |            |                 |                 |               |                 |

# SUN2000-185KTL-H1

## Smart String Inverter



9  
MPP Trackers



99.0%  
Max. Efficiency



String-level  
Management



Smart I-V Curve  
Diagnosis Supported



MBUS  
Supported



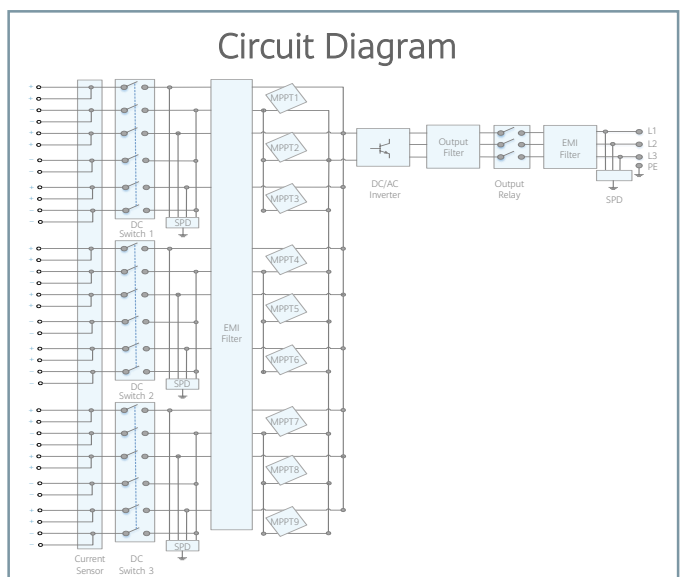
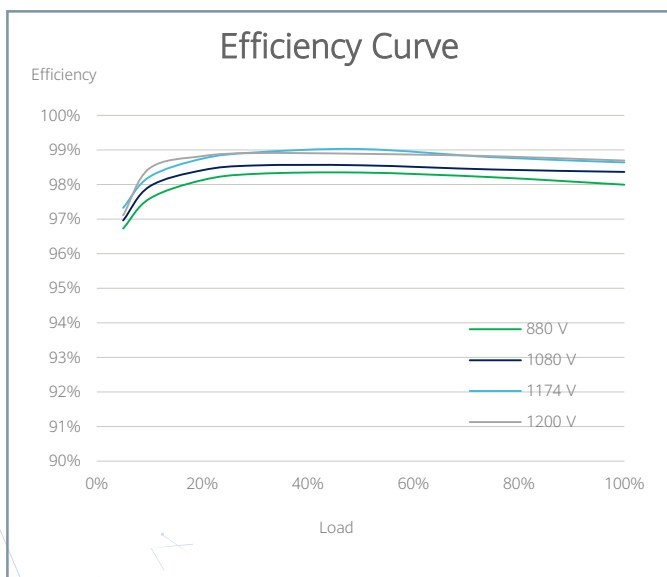
Fuse Free  
Design



Surge Arresters for  
DC & AC



IP66  
Protection



# Technical Specifications

| Efficiency  |  |
|---|--|
| Max. Efficiency                                   | 99.03%   |
| European Efficiency                               | 98.69%   |
| Input   |  |
| Max. Input Voltage                                | 1,500 V  |
| Max. Current per MPPT                             | 26 A   |
| Max. Short Circuit Current per MPPT               | 40 A   |
| Start Voltage                                     | 550 V  |
| MPPT Operating Voltage Range                      | 500 V ~ 1,500 V  |
| Nominal Input Voltage                             | 1,080 V  |
| Number of Inputs                                  | 18   |
| Number of MPP Trackers                            | 9  |
| Output  |  |
| Nominal AC Active Power                           | 175,000 W @40°C  |
| Max. AC Apparent Power                            | 185,000 VA   |
| Nominal Output Voltage                            | 800 V, 3W + PE   |
| Rated AC Grid Frequency                           | 50 Hz / 60 Hz  |
| Nominal Output Current                            | 126.3 A @40°C  |
| Max. Output Current                               | 134.9 A  |
| Adjustable Power Factor Range                     | 0.8 LG ... 0.8 LD  |
| Max. Total Harmonic Distortion                    | < 3%   |
| Protection  |  |
| Input-side Disconnection Device                   | Yes  |
| Anti-islanding Protection                         | Yes  |
| AC Overcurrent Protection                         | Yes  |
| DC Reverse-polarity Protection                    | Yes  |
| PV-array String Fault Monitoring                  | Yes  |
| DC Surge Arrester                                 | Type II  |
| AC Surge Arrester                                 | Type II  |
| DC Insulation Resistance Detection                | Yes  |
| Residual Current Monitoring Unit                  | Yes  |
| Communication                                     |  |
| Display   | LED Indicators, Bluetooth/WLAN + APP   |
| USB   | Yes  |
| MBUS  | Yes  |
| RS485   | Yes  |
| General   |  |
| Dimensions (W x H x D)                            | 1,035 x 700 x 365 mm (40.7 x 27.6 x 14.4 inch)   |
| Weight (with mounting plate)                      | 84 kg (185.2 lb.)  |
| Operating Temperature Range                       | -25°C ~ 60°C (-13°F ~ 140°F)   |
| Cooling Method                                    | Smart Air Cooling  |
| Max. Operating Altitude without Derating          | 4,000 m (13,123 ft.)   |
| Relative Humidity                                 | 0 ~ 100%   |
| DC Connector                                      | Staubli MC4 EVO2   |
| AC Connector                                      | Waterproof Connector + OT/DT Terminal  |
| Protection Degree                                 | IP66   |
| Topology  | Transformerless  |
| Standard Compliance (more available upon request) |  |
| Certificates                                      | EN 62109-1/-2, IEC 62109-1/-2, EN 50530, IEC 62116, IEC 60068, IEC 61683, IEC 61727, IEC 62910, P.O. 12.3, RD 1699, RD 661, RD 413, RD 1565, RD 1663, ABNT NBR 16149, ABNT NBR 16150, ABNT NBR IEC 62116 |