Micro Grid Systems – 1.0MW
Highly Efficient Plug-N-Play Containerized Off-Grid Energy Solutions

SOLAR PANELS

| Number of Panels | Pmax 280W 460W | Vmp 35.30V 48.86V | Imp 7.93A 9.40A | IEC, UL 1000V 600V | Various Configurations | Dependent on Configuration | 12 Yrs & 25 Yrs Limited on Minimum Power Output | TUV, SUD, CQC, UL, CE, ROHS, MCS, ISO9001 | 4 per Panel |

GROUND MOUNT RACKING

5-Panel high racking in landscape with 44 columns or ballast boxes per row (45 posts). Sixteen (16) total rows. A different layout, orientation, tilt, panel clearance, or snow load will require further engineering and additional costs.

PILE DRIVEN

- 3.35m GALVANIZED STEEL POSTS 760
- 4.35m GALVANIZED STEEL PURLINS 760
- CLIPS FOR PANEL MOUNTING 4 per Panel
- TILT 20 Degrees
- SNOW LOAD 0 psi
- FRONT PANEL CLEARANCE 76.2 cm

BALLASTED GROUND MOUNT

- BALLAST BOX 760
- DIMENSIONS (LxWxH) 198 cm x 61 cm x 30.5 cm
- 1.28m FRONT POST 760
- 1.9m REAR POST 760
- 4.35m GALVANIZED STEEL PURLINS 760
- CLIPS FOR PANEL MOUNTING 4 per Panel
- TILT 20 Degrees
- SNOW LOAD 0 psi
- FRONT PANEL CLEARANCE 76.2 cm

BATTERY

Battery storage is based on daily consumption and load profile of 2800 KWh with one day of autonomy. Batteries recharge through PV and Generator. If a larger configuration of batteries is desired, additional costs may apply.

OPERATION & PERFORMANCE

- STORAGE CAPACITY 2.932 MWh
- NOMINAL ENERGY 25.9 KWh
- CYCLE LIFE 3,000 Cycles (to 70% Retained Capacity)
- AMBIENT OPERATING TEMP -5 ºC to 40 ºC
- PEAK POWER 11.7 KW
- CONTINUOUS CURRENT 240 A
- DIMENSIONS Various Configurations
- WEIGHT 1504 Kg per Section
- LIMITED WARRANTY 8 Years; 5 Yrs full + 3 Yrs Prorated

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**INVERTER**
- INVERTER RATING: (4) 250 KW = 1.0 MW
- POWER TERMINALS: (2) DC and (1) AC / Inverter
- POWER STAGE TECHNOLOGY: High-Frequency PWM
- POWER STAGE CONFIGURATION: (4) Fully Independent Power Stages
- SIZE (LxWxH): 241 cm x 104 cm x 178 cm
- DIMENSIONS (LxWxH): 1957 mm x 990 mm x 50 mm
- WEIGHT: 1,632 Kg
- ENCLOSURE: NEMA 3 (Outdoor)
- WARRANTY: 5 Years
- DC PORT For Battery
  - INPUT TYPE: Battery
  - DC VOLTAGE: 415-600 VDC
  - MAX CURRENT: 640 A
  - MAX CONTINUOUS POWER: 265 KW
  - BATTERY CHARGE CONTROLLER: Configurable 3-Stage Profile for Batteries
  - BATTERY MANAGEMENT SYSTEM: External Control for BMS Interface

**AC PORT – Generator**
- AC LINE VOLTAGE: 400-440 AC
  - 3-Phase, 3-Wire Optimal
- AC LINE FREQUENCY: 50 Hz Nominal
- CONTINUOUS AC CURRENT: 325 A
- CONTINUOUS AC POWER: 250 KVA
- ISOLATION FROM AC: Yes (Internal)
- OFF-GRID CONTROL FEATURE: Grid-forming Voltage Source
- ON-GRID/OFF-GRID AUTO TRANSFER TIME: Autonomous Power Sharing Synchronized Start

**DISCONNECT COMBINER BOX**
- NUMBER OF COMBINERS: 8
- DISCONNECT AMPACITY: 400 Amps
- PREWIRED INPUT CIRCUIT CABLE WHIPS: 30
- # OUTPUT CONDUCTORS: 1 or 2
- OUTPUT CONDUCTOR SIZE RANGE: #2 AWG to 600 MCM
- WEIGHT: 29.5 Kg
- NEMA RATING: NEMA 4
- ETL LISTED TO UL-1741: 600 VDC & 1000 VDC

**GENSET**
- DIESEL GENERATOR
  - RATING: 1000 KW / 1250 KVA / 60 Hz
  - DIESEL ENGINE: Regulated
  - VOLTAGE LEADS: 208 / 240 / 480
  - MAIN CURCUIT BREAKER: 2000 A
  - ELECTRONIC START: 12 VDC Start, Battery & Charger
  - LOAD SHARING CONTROLLER: Included
  - FUEL TANKS SIZE: 8000 Liters
  - START-UP & COMMISSIONING: Included
  - WARRANTY: Optional

**MICRO GRID CONTAINER CONTENTS**
- Micro Grid Container is a customized “plug-n-play” system that comes pre-wired with the inverter, batteries, and AC load panel. Wires run from the PV field and GENSET directly to the container, then from AC to the loads.
  - INVERTER: (4) 250 KW
  - BATTERIES: 2.932 MWh
  - BATTERY RACKING: Customized
  - TRANSFORMER: 208 / 240 / 277 Hz, 3-Phase
  - AC BREAKER PANEL: 400 A, 3-Phase
  - MICRO GRID MONITORING SYSTEM: Yes, Connection for Data
  - CONTAINER SIZE(S): 40 FT HC

**U.S. SPECIFICATIONS**

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System sizing, stringing & layout are climate dependent. Products & specifications are subject to change without notice. Products are warranted only to meet Sun-In-One data sheet specifications.

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