

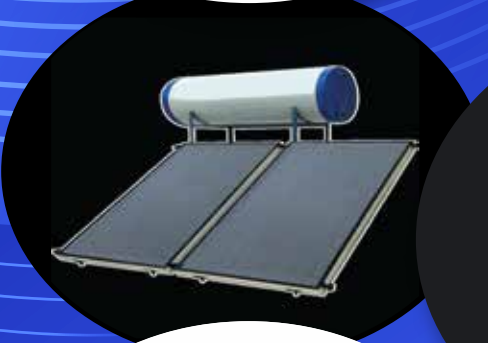


www.mobilemart.co.ke

# MobileMART

Inspiring Solutions

## MobileMART Systems Solutions Company Profile



MobileMART Systems Solutions Supply Install and Commission HYBRID SMART Solar & Hydro - Electric Power & Electro - Magnetic Power Systems to manage monitor control and regulate power bills. The Energy Systems save off the Power Bills on a Power Purchase Agreement (PPA). We Plan Design Implement & Manage (PDIM) and Lease to Own (LTO) Energy as a Service on Pay-Go Contractual Period with Warranty and Maintenance Services - Engineering Procurement Construction (EPC).  
 Climate Change Migration | Net Zero Carbon Footprint | Green Energy Systems Solutions.

MobileMART Systems Solutions LTD ®  
 +254.722.254123  
 www.mobilemart.co.ke

**DOMESTIC SOLAR SYSTEM**

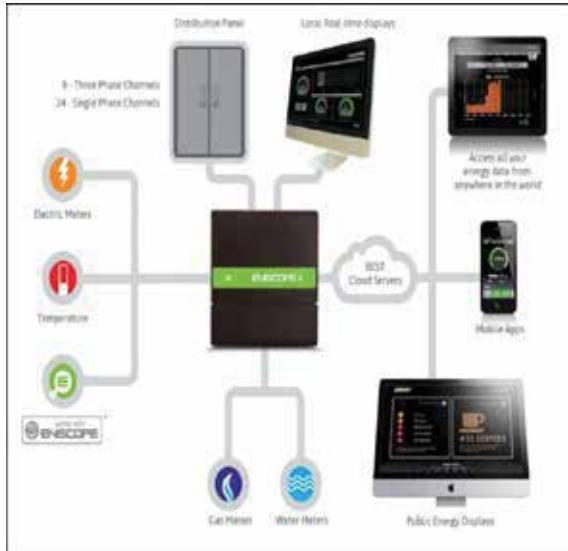


**SOLAR FOR SCHOOLS**



**MOBILEMART TEAM AT WORK**





POWER YOUR HOME

**COMBO OFFER**

TBB Hybrid Inverter  
8kva 48volts

10kwh Megatank  
Lithium Battery

Call Us : 0722 254 123  
0733 254 123

switch to solar power

www.mobilemart.co.ke

**Megatank All-in-one**  
8kva Hybrid Inverter  
10kwh Lithium Battery

**SPECIAL PRICE**

Call Us : 0722 254 123  
0733 254 123

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**COMBO OFFER**

Reduce Your Energy Bill  
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Lithium Battery

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0733 254 123

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Bifacial Double Glass  
High Efficiency Mono Module

**JA SOLAR**  
**590 WATTS**

TYPE	3MWT5D40-600/GB
Rated Maximum Power (Pmax) [W]	590
Open Circuit Voltage (Voc) [V]	32.37
Maximum Power Voltage (Vmp) [V]	44.43
Short Circuit Current (Isc) [A]	13.94
Maximum Power Current (Imp) [A]	13.28
Module Efficiency [%]	22.8
Power Tolerance	0~+1%
Temperature Coefficient of Isc (Isc/Tc)	+0.046%/°C
Temperature Coefficient of Voc (Voc/Tc)	-0.260%/°C
Temperature Coefficient of Pmax (Pmax/Tc)	-0.290%/°C

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0733 254 123

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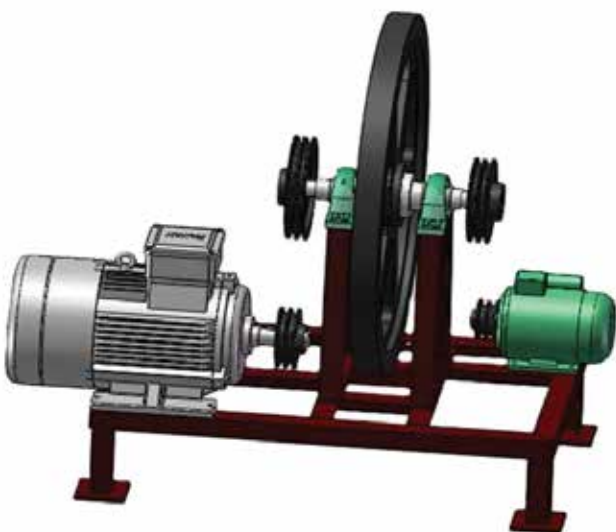
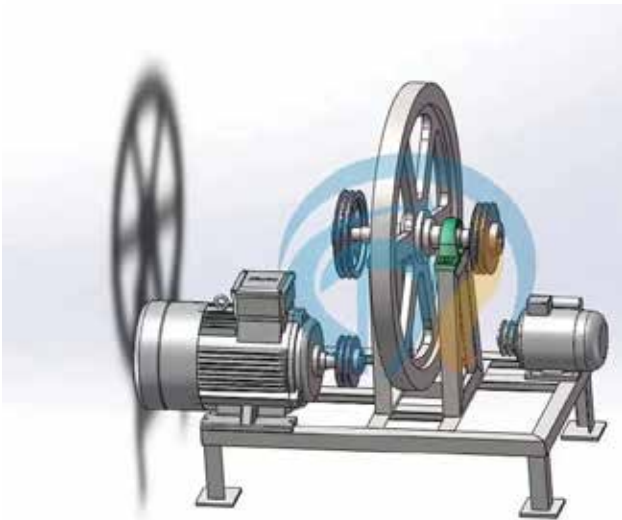
**COMBO OFFER**

Deye Hybrid Inverter  
12 kva 48volts

4 Stackable  
Lithium Valley Battery (5.12 kwh)

www.mobilemart.co.ke  
Call Us : 0722 254 123  
0733 254 123

Deye + Lithium Valley





Solar Garden Light



**MobileMART**  
 Inspiring Solutions  
 www.mobilemart.co.ke

DOMESTIC SOLAR SYSTEM



SOLAR FOR SCHOOLS



MOBILEMART TEAM AT WORK



MobileMART Green Energy Solutions Solar & BEST ENERGY (British Energy Systems Technology) Supply Install and Commission Eniscope :- Energy Management & Efficiency Monitoring and Control. This Saves and Regulates @ 30% of the Energy Loss in Power Bills using Artificial Intelligence - Internet of Things IoT. Solar Systems Save 70% off the Power Bill on a Power Purchase Agreement (PPA). We Plan Design Implement & Manage. (PDIM) and Lease & To Own Solar as a Service (SaaS) on PayGo Contractual Period with Warranty and Maintenance Services. Dial: +254.722.254123



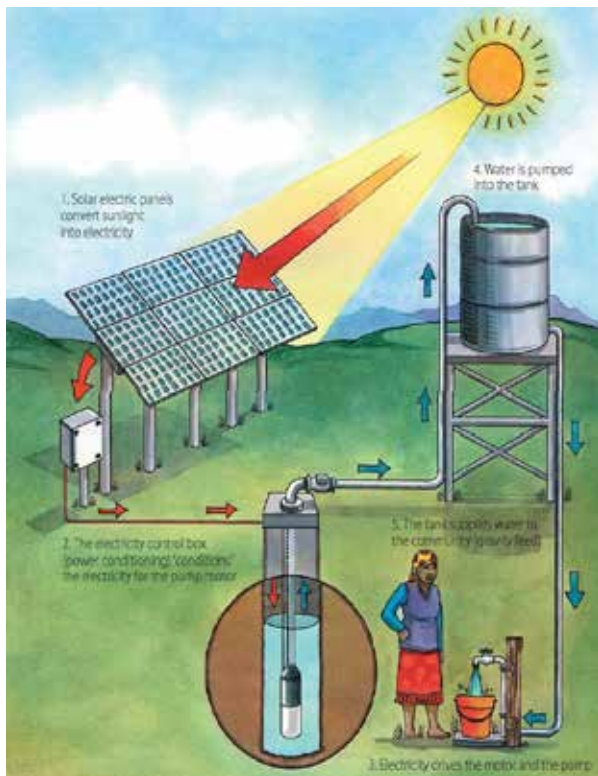
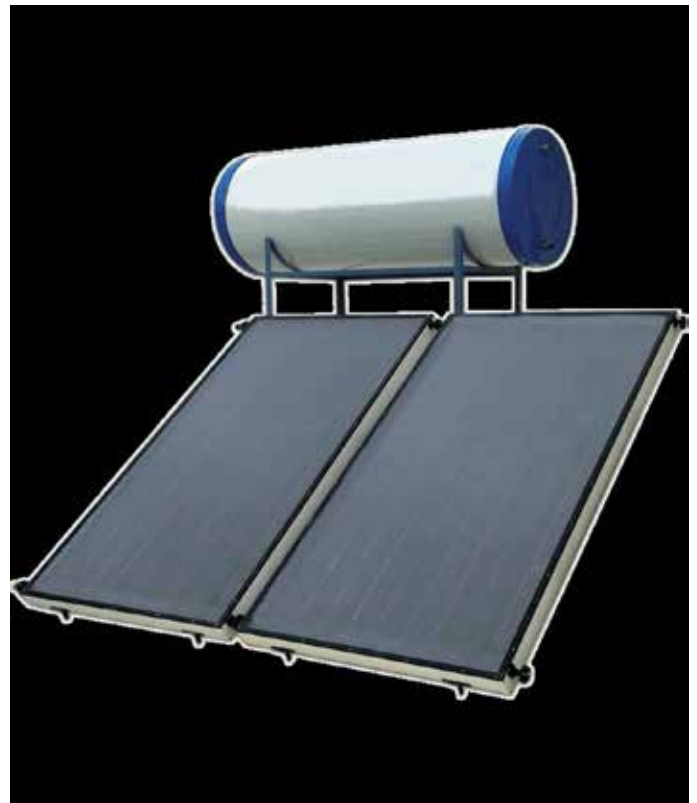


**Shiyuan Solar DC  
Submersible Pump**

**72 volts - 70 Meters  
& 600w Power**

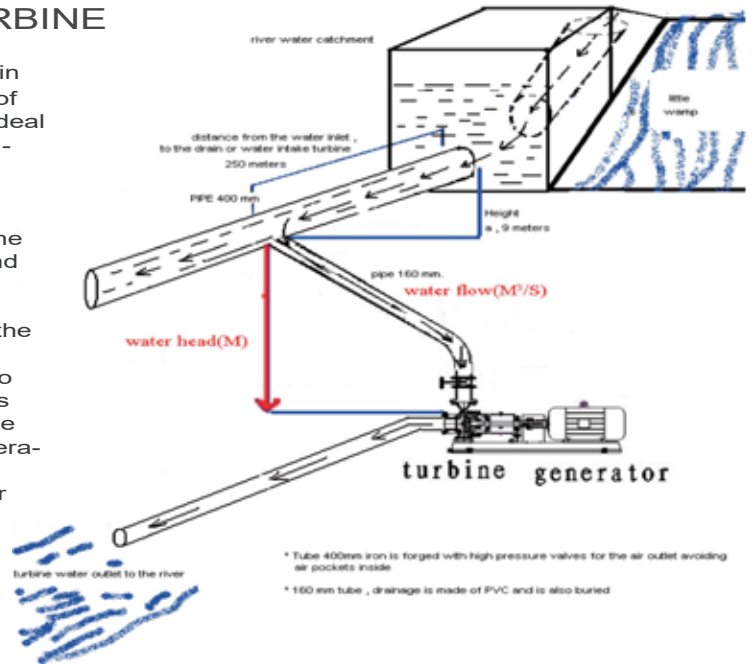
**SYDC72V/S-70**  
Voltage:DC72V  
Max Head:70m  
Power:600W

MOBILEMART PHOTOGRAPH



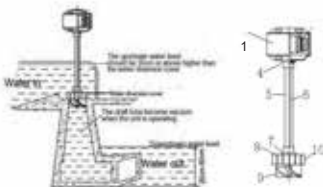
## INTRODUCTION OF WATER TURBINE

There are abundant micro hydraulic power resources in the world and it is economically feasible to make use of These water resources. Our company manufactures ideal Micro hydro generators to satisfy people's daily and industrial needs for power, using the recyclable and Eco-friendly water resources. Micro hydropower stations should be constructed in places where there are certain water head. Through the construction of barrage, water within small streams and mountain springs is collected. By guiding the water into turbine inlet pipe, the turbine impeller will be forced to rotate under the pressure energy or kinetic energy of the fluid. The rotor of turbine generator which is in the same axial of turbine impeller will rotate with respect to stator. Thus, power is generated and supplied to users through power transmission lines. When buying turbine generator, users should select the proper turbine generator with proper specifications of water head and water flow rate, according to the own site conditions of water resource Or else, the rated power may not be generated or the generator may be easily damaged. Water head diagram

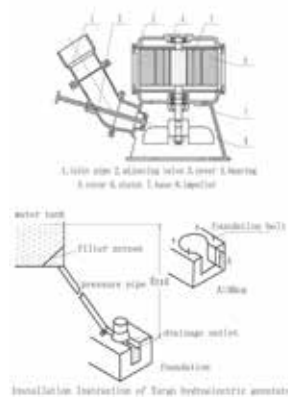


### INNER STRUCTURE

1. Generator
2. Stator (coil)
3. Permanent magnet rotor
4. Top bearing housing
5. Outer axis
6. Inner axis
7. Bottom bearing housing
8. Turbine
9. Blades
10. Water diversion cover



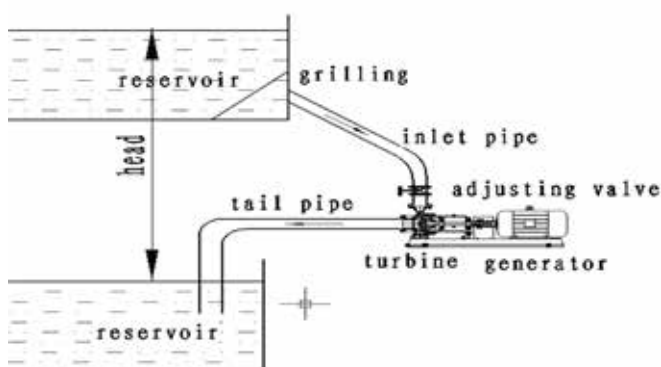
### STRUCTURE



### REFERENCE PHOTOS



### INSTALLATION



### REFERENCE PHOTOS





**Residential Power Backup**  
 CAPACITY: 5Kw  
 Karen Hardy



**40KW REA Mini-grids**  
 CAPACITY: 40Kw  
 Nairobi



**Commercial Ground Mount PV System**  
 CAPACITY: 170KW Kilengela



**Residential Hybrid 3 Phase System**  
 CAPACITY: 10KW  
 Nairobi



**Kamulu Borehole**  
 CAPACITY: 11KW  
 Kamulu, Michakos



**Lang'ata Residential Solar PV System**  
 CAPACITY: 6Kw  
 Lang'ata, Nairobi



**Kamakis A01 Residential PV System**  
 CAPACITY: 1Kw Kamakis



**Solar Water Pumping**  
 CAPACITY: 11KW  
 Kabiria



**Sultan Hamud Borehole**  
 CAPACITY: 4KW  
 Sultan Hamud



**Ridgeways 10kw Residential Hybrid System**  
 CAPACITY: 10KW  
 Nairobi



**Solar Borehole Water Pumping**  
 CAPACITY: 4Kw  
 Emali, Makueni



**Ridgeways 10kw Residential Hybrid System**  
 CAPACITY: 10KW  
 Nairobi



**Off-grid PV System**  
 CAPACITY: 100KW  
 Karen, Nairobi



**SMA Multiclustor System**  
 CAPACITY: 50KW  
 Nairobi



**Apex Steel industries: Megawatt range projects**  
 Nairobi



**Solar PV System**  
 CAPACITY: 5KW  
 Wote



**Common Area Solar PV**  
 CAPACITY: 5Kw  
 Kenol Muranga



**Vivo Shell Kahawa Sukari**  
 CAPACITY: 12Kw  
 Kahawa Sukari, Nairobi



**Borehole Solarization**  
 CAPACITY: 8 KW  
 Narok



**Commercial Grid-Tie System**  
 CAPACITY: 600KW  
 Nakuru



**Kamulu Solar Water Pumping System**  
 CAPACITY: 15Kw  
 Kamulu



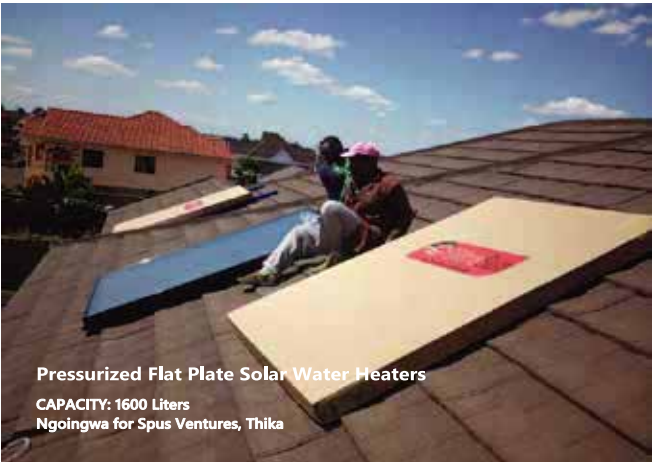
**Nanyuki Commercial PV System**  
 CAPACITY: 100Kw  
 Nanyuki



**Solar Water Heating System**  
 CAPACITY: 6400 Liters  
 Dorothy Park Langata By Sekandi Holdings



**100Kw Roof Mount System**  
 Nairobi



**Pressurized Flat Plate Solar Water Heaters**  
 CAPACITY: 1600 Liters  
 Ngoingwa for Spus Ventures, Thika



**Solar Water Heater Installation**  
 CAPACITY: 200 Liters Non-Pressurized  
 Komarock Heights



**Roof Mount System**  
 CAPACITY: 600 KW  
 Naivasha



**Roof Mount System**  
 CAPACITY: 600 KW  
 Naivasha





## Solar for Business

MobileMART Systems Solutions Supply Install and Commission HYBRID SMART Solar energy management and efficiency systems to manage monitor control and regulate power bills using Artificial Intelligence - Internet of Things IoT. The Smart Solar systems saves off the Power Bill on a Power Purchase Agreement (PPA). We Plan Design Implement & Manage. (PDIM) and Lease to Own (LTO) Solar as a Service on Pay-Go Contractual Period with Warranty and Maintenance Services - Engineering Procurement Commissioning (EPC)

We Design the KWp Smart Solar System and to utilize the abundant sunlight generated power that is directly used during the day and battery backup at night. The SMART HYBRID System works seamlessly for energy management and efficiency and is aimed at cutting down on electricity bills at the facility and reduction of carbon footprints in mitigation to climate change. We have Solar Street Lights, Thermal Solar Water Heating System and Water Solar Pumps.

## What is a solar power purchase agreement? Lease and Own

A solar power purchase agreement (PPA) Lease and Own is a financial agreement where we developer arranges for the design, permitting, financing and installation of a solar energy system to the school property at little to no cost. The developer sells the power generated to the school at a fixed rate that is typically lower than the local utility's retail rate. This lower electricity price serves to offset the customer's purchase of electricity from the grid while the developer receives the income from these sales of electricity as well as any tax credits and other incentives generated from the system. Our PPAs will typically range from 3-5 years and the developer remains responsible for the operation and maintenance of the system for the duration of the agreement. At the end of the PPA contract term, a customer may be able to extend the PPA, have the developer remove the system or choose to buy the solar energy system from the developer

### DOMESTIC SOLAR SYSTEM

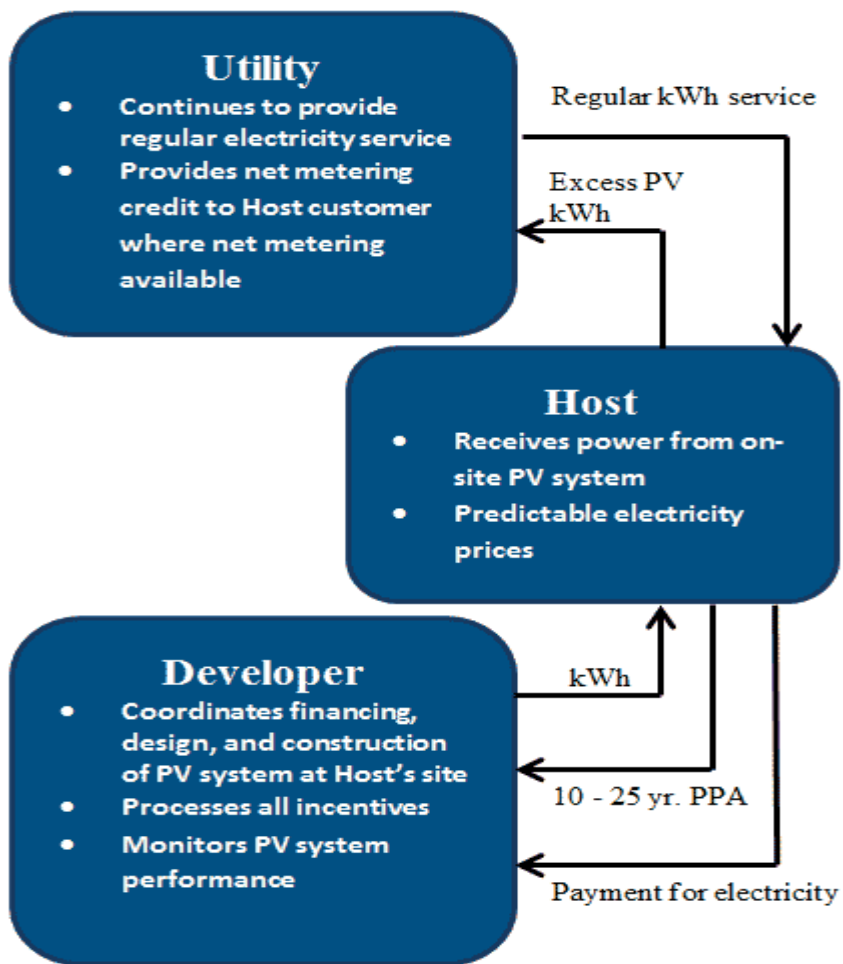


### SOLAR FOR SCHOOLS



### MOBILEMART TEAM AT WORK





## Benefits of PPAs to Solar Business

**No or low upfront capital costs:** The developer handles the upfront costs of sizing, procuring and installing the solar PV system. Without any upfront investment, the host customer is able to adopt solar and begin saving money as soon as the system becomes operational.



- **Reduced energy costs:** Solar PPAs provide a fixed, predictable cost of electricity for the duration of the agreement and are structured in one of two ways. Under the fixed escalator plan, the price the customer pays rises at a predetermined rate, typically between 2% - 5%. This is often lower than projected utility price increases. The fixed price plan, on the other hand, maintains a constant price throughout the term of the PPA saving the customer more as utility prices rise over time.
- **Limited risk:** The developer is responsible for system performance and operating risk.
- **Better leverage of available tax credits:** Developers are typically better positioned to utilize available tax credits to reduce system costs. For example, municipal hosts and other public entities with no taxable income would not otherwise be able to take advantage of the Section 48 Investment Tax Credit.
- **Potential increase in property value:** A solar PV system has been shown to [increase residential property values](#). The long term nature of these agreements allows PPAs to be transferred with the property and thus provides customers a means to invest in their home at little or no cost.

## Market Adoption and Policy

PPAs provide a means to avoid the upfront capital costs of installing a solar PV system as well as simplifying the process for the host customer. In some states, however, the PPA model faces regulatory and legislative challenges that would regulate developers as electric utilities. A solar lease is another form of third-party financing that is very similar to a PPA, but does not involve the sale of electric power. Instead, customers lease the system as they would an automobile. In both cases, the system is owned by a third party while the host customer receives the benefits of solar with little or no up-front costs. These third-party financing models



Mobile mart is specializing in offering our customers integrated business solutions backed by our technical expertise and in-depth understanding of local markets. Decades of extensive experience operating in remote areas and an urgent requirement to help our clients increase their operational efficiency by reducing total cost of ownership, has led our engineering teams to design and develop the ManSolar.

ManSolar is a scalable Photovoltaic KIT, it is excellent in performance, has an aesthetic design and consists of premium quality components such as Photovoltaic Modules, PV-Inverters, DC harnesses and the most reliable mounting systems for ground and roof applications. The solution is customized to provide clean, efficient, economic and reliable power to meet your needs.

## Key Solutions Advantage

- Fuel Cost Reduction: PV solutions provide fuel cost reductions in case there are any and the LCOE generated with solar is lower than grid prices for residential, commercial and industrial customers.
- Fixed Prices: Once the solar system has been installed, the price of electricity generated is fixed for at least 25 years.
- Remote Capabilities: Where there is no grid power available, small scale and portable solar technology can be used to bring light & communication to the remotest of places.
- Cheaper Power: Due to the long life, falling capital costs and very low running costs of solar power, this renewable energy technology can provide power which is cheaper than retail price power or power standby generators.



## Applications Coverage:

### Factories



- On-Grid PV Solutions complying FITs or Net-Metering.
- Energy Cost Reduction for Food Processing Factories, Industrial Compounds.

### Residential



- Any Commercial & Residential application.
- Rural Electrification.

### Energy Storage



- Straight forward interface with existing Generators, Energy Storage, Power Containers.

### Institutions



- Public and private PPA (Power Purchase Agreement) market.
- Institutional and private Investors.

### Customized Solution



- Customized TurnKey solution, Commissioning, post Sales Service and O&M can be provided upon request.



# Solution Breakdown:

## Controllers

We provide Master Hybrid controllers engineered to synchronize gensets with Batteries for generating power as well as existing grid through decades of experience with systems with CATERPILLAR

## PV Modules Features

- Robust and durable module design.
- %100 Potential Induced Degradation PID free.
- Outstanding performance at high temperatures.
- IP 67 Junction box for long-term weather endurance.
- Heavy Wind load up to 2400Pa.
- 10-year product warranty and 25-year linear power output warranty.

## PV DC Harnesses Features

Cable and harness solutions satisfy the need for pre-cut and/or pre-terminated segments of PV wire for connecting PV modules to string combiners and inverters. Terminations are compatible with standard PV module connectors and string combiner whips or input fuse holders.

## Battery

Mantrac aim to supply the optimal solutions using the most appropriate Energy Storage Solutions case by case, using the ultimate technologies available in the market.

## String Inverters Features

- Degree of protection IP65 per IEC60529
- Operating temperature range -40°C to 60°C
- Efficiency Max > %98
- 5 year product warranty (extendable upon request).

## Mounting System Features

- Durable mounting structure suitable for site conditions.
- The structure components are made of Galvanize Steel and aluminum providing versatility, ease and speed of installation with no welding of components required at site.
- 100% weather proof, noncorrosive
- 0 – 60 ° of tilt angle range (fixed and adjustment at manufactured/installation) which meets the required module tilt angle for the power stations coordinates with more degrees for adjusting purposes.
- Resist wind speed up to 35 m/sec.
- The structure is electrolytically compatible with the module frames and fasteners.
- The array structure allows for easy detection and replacement of a failed PV module.

## KIT Composition:

PV KITS	kWp (min-max)
ManSolar 50	1 - 50
ManSolar 100	50 - 100
ManSolar 500	100 - 500
ManSolar 5000	500 - 5000
ManSolar-Plus	5000 - 50000

## Additional Components on demand:

Energy Storage	Hybrid Controllers
Lithium-Ion Batteries	Master Hybrid Controller
Lead Acid Batteries	Gensets Controller

Monitoring System
ManConnect

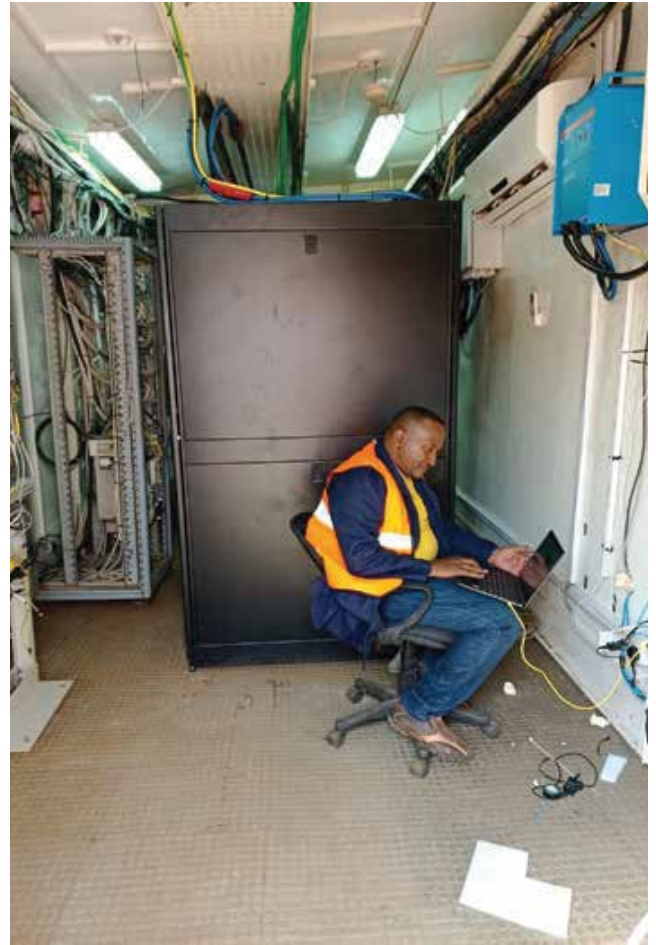




## MobileMart Maintenance Services – You Can Count On Us

High parts availability, coupled with prompt and professional product support represent an integral part of our overall commitment to customer satisfaction.

Running an efficient operation gives your business a competitive advantage. We offer a menu of remote and on-site support contracts to help you enhance every aspect of your operation, so you can work faster and more efficiently than ever. Throughout the lifetime of every product we supply, our extended global network of certified experts and technical resources will be on call to quickly meet all your repair and service needs. The Mobile Mart O&M division draws on expertise from an array of dedicated in-house support teams. Each of these groups are made up of directly-employed professionals using best-in-class technology and systems to ensure that every site/system receives the services it needs to achieve optimum performance. Fully-equipped field service vehicles, high-tech diagnostic tooling and round-the-clock availability of engineers combine to ensure that your downtime is kept to a minimum.



## COUNT ON OUR FINANCIAL

Our Financial provides a wide range of financing alternatives for equipment purchasing. This is accomplished by understanding the way you work every day, the challenges you face, your competition and industry. This helps us create financing plans unique to your current business needs.

## WHY MOBILEMART FINANCIAL?

- ■ ■ Our Financial works with you to provide solutions customized to your needs.
- ■ ■ Offering a wide array of financial plans, flexible payment schedules, and competitive rates.
- ■ ■ Provide convenient, one-stop shopping with fast credit turnaround and user-friendly documentation.
- ■ ■ Support customers and keep long-term relationships.

MobileMART Systems Solutions  
P.o. Box 4056 - 00100 Nairobi, Kenya  
Cell: +254 722 254 123  
Email. [support@mobilemart.co.ke](mailto:support@mobilemart.co.ke),  
[www.mobilemart.co.ke](http://www.mobilemart.co.ke)

