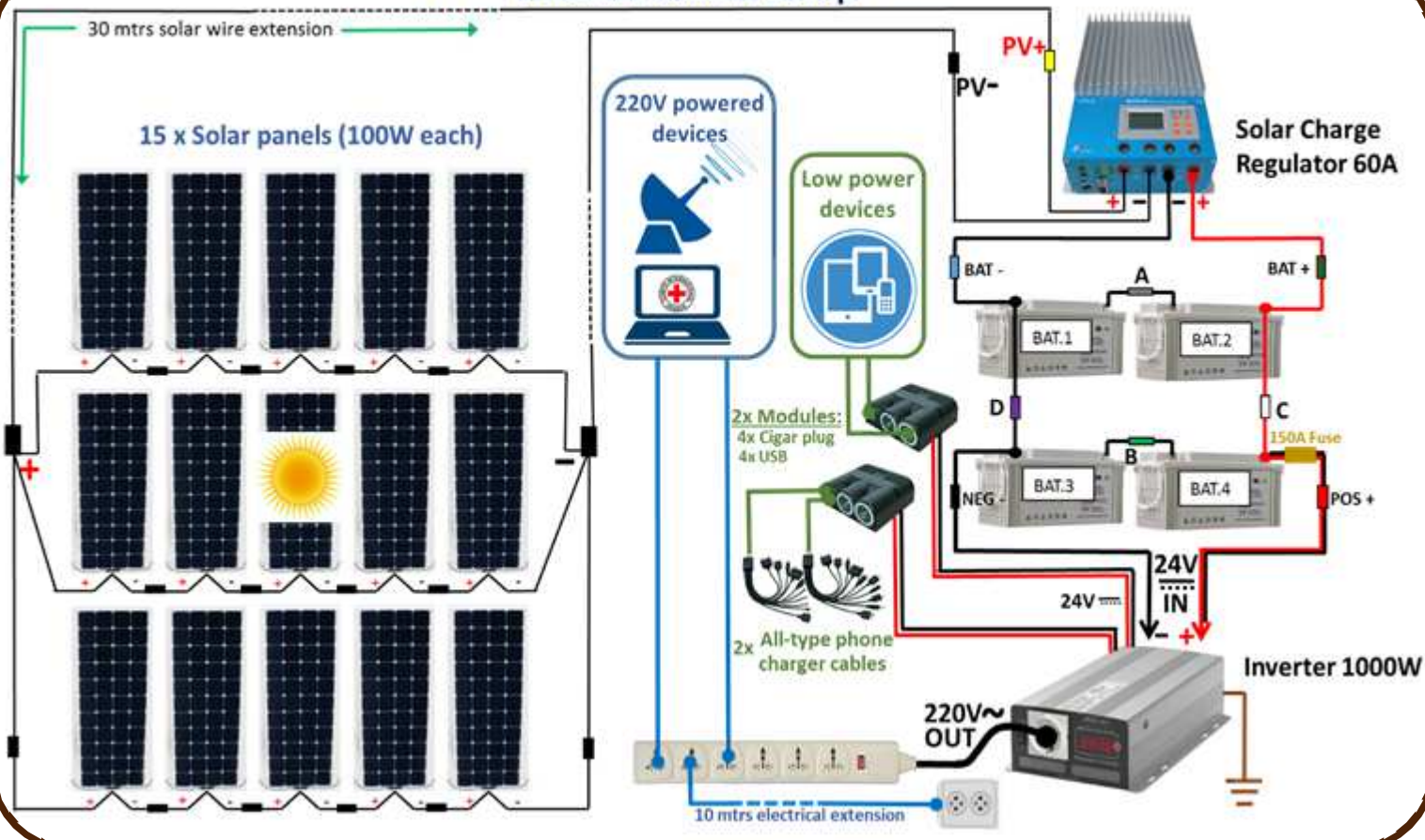


## \*\*\*\*\* Solar Kit 1500W Setup \*\*\*\*\*



### Code

KENG SOLA3800WH

### Description

KIT, SOLAR PANELS 1500W, 24V/USB/230V with 4x80Ah batteries

### General information

**Powerful and easy to setup/transport**, this solar kit can power and/or charge almost any electrical device, up to 900W total power load on 220VAC socket.

This kit was designed in-house by ICRC and conditioned / prepared by trained teams through partnership with a Swiss welfare association (ORIF).

Thanks to the practical layout, this kit can be rapidly packed/unpacked and transported easily.

All connectors are color marked, tags, full instructions and map to facilitate setup.

It is airline checkable. On the ground, a vehicle is needed to move it from place to place.

Using USB or car charger ports will discharge much less than using AC socket (900W max load!).

Car charger sockets (cigar ports) deliver 24V output which is compatible with devices that can be charged this way and come with their proper cigar plug, i.e. satphones Iridium or Thuraya, laptops, etc..

Avoid drawing high power from the kit (220VAC) while not being charged with solar panels, i.e. at night.

Always try to keep the battery under charging mode and keep an eye at the charging level indicator !

Intended to be charged from solar panels only, even though batteries could be recharged separately with a 24V battery charger (not included in the kit)

**Designed for medium to large size team** (office setup, emergency, assessment etc..)

The AGM (Absorbent Glass Mat) Battery type is approved for air transport, without special packing. 6 airline checkable parcels, less than 32 Kgs each.



## Content

- ✓ Central unit:
  - > Hard molded plastic case for transport (Kappeler)
  - > Inverter connected and fitted on wooden board
  - > Solar regulator connected and fitted on wooden board
  - > 4x pre-assembled/connected power wires
  - > 2x pre-assembled/connected solar cables
  - > 2x 30mtrs solar cables extension
  - > 2x 1mtr solar cables extension
  - > 2x triple solar connectors
  - > 1x wire for ground connection
  - > Guying rope reel for panels
  - > 2x fitted and connected modules USB / car charger sockets
  - > 2x cables multi format connectors (USB)
  - > 1x electrical extension 10mtrs
  - > 1x universal multi-plug (x6 entries)
  - > 1x laminated setup instructions
  - > 1x padlock
- ✓ Solar panels:
  - > 15x solar panels monocrystalline semi-rigid 100W
  - > 1x Soft bag with wheels for transport (all panels in one bag)
  - > 1x padlock
- ✓ Batteries:
  - > 4x batteries AGM lead-acid, pre-wired
  - > 4x aluminium boxes with protective foam inside
  - > 4x padlocks
  - > 1x fuse and fuse holder + 2 spare fuses, in battery case n°4

## Specifications

### General

1500W max power source (solar panels)

160AH total capacity on 24V

2x USB ports and 2x cigar sockets

Estimated charging time whole kit: 2 - 4 Hours

3800WH total energy (nom.)

Total net weight, packed and ready for deployment: **190 kgs**

The whole kit is delivered ready for check-in and operational

Indicative price: **7,800 CHF**

### Battery (x4)

Brand/Model: Hoppecke / Solar Bloc

Type: Sealed AGM Lead-Acid

Capacity: 80Ah (12V)

Shelf-life: Charge every 3-6 months

Size battery: 30 x 19 x 17,5 cm



### **Solar panel (x15)**

Brand/Model: Shenzhen Sanyifeida Tech / SYFD-FSPC100W  
Each panel: 100W / 18-22V (Open Circuit Voltage)  
Voltage max power: 17.7V  
Current max power: 5.70A  
No of cells: 32 (4x8)  
Efficiency: 17.4%  
Semi-flexible, monocrystalline and chainable  
Size per panel: 106 x 54 x 0.3 cm  
Weight per panel: 1.85 Kg



### **Solar regulator**

Brand/Model: EPSolar / eTracer MPPT 60A (ET6415BND)  
Nominal System Voltage : 12V/24V /36V/48V auto work  
Rated battery current: 60A  
Max. PV open circuit voltage : 150V  
Voltage range : 8 to 72V  
Max. PV input power : 1600W (24V)  
Float charging voltage: 13.8V  
Boost charging voltage: 14.2V  
Self-consumption : 1.4 to 2.2W  
Operating Temp. range: -25°C to +50°C  
Overall dimension : 449x208x107mm  
Net weight : 5.5Kg



### **Inverter**

Brand/Model: RIPEnergy / JAZZ PRO 1000  
Output Voltage: 200VAC – 220VAC – 230VAC - 240VAC selectable  
Output Frequency: 50Hz – 60Hz selectable  
Continuous Output Power: 1000W  
Surge Rating: 2000W  
Output Waveform: Pure Sinewave  
Input Voltage: 24VDC  
Amps @Nom.power : 46A  
Operating Temp. range : -20°C to +60°C  
Fan: Load and temperature controlled  
Protection circuitry: Short circuit, Overload, Overtemperature, Over/Undervoltage  
Case material: Aluminium  
Overall dimension : 334x179x81mm  
Net weight : 3.8Kg  
Standards: Approval to CE, LVD



### **Fixed sockets/ports in main unit**

4x USB ports (output): 5V  
4x Cigar port (output): 24V  
1x AC universal socket (output inverter): 220VAC, 50Hz, 900W Max



x2

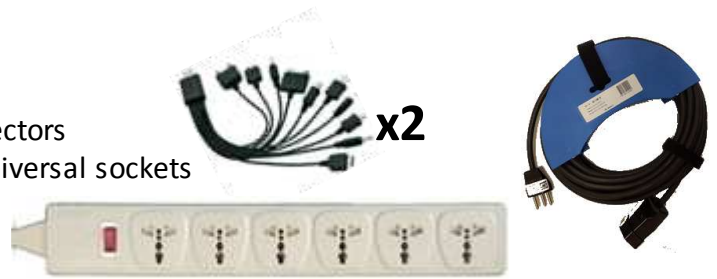


### Additional Ports (accessories)

2x USB cables set with output of 10 types phone connectors

1x 1mtr electrical extension with 6 entries 220VAC - universal sockets

1x 10mtrs electrical extension



### Transport

Main Unit: 1 hard molded plastic box with wheels and telescopic handle

Brand: Kappeler

Size: 70 x 44 x 42

Weight with all items inside: 30Kgs



Batteries: 4x cases aluminium

Brand: Zarges

Size: 38,5 x 28,5 x 34 cm

Weight per case with battery: 32 Kgs



Solar Panels: Soft bag with wheels

Brand: Fusion

Size: 128 x 58 x 22 cm

Weight all panels in soft bag: 32 Kgs

