

# OFF-GRID AC COUPLING SYSTEM

## Al-Rubat / Tareem – Hadramout / Yemen



This system consist of two parts which will give the information of them below.

### System Components:

#### Part one:

Size of the solar system 33 kW.

**Batteries:** (28) 31-GEL 12V/102Ah Trojan Battery.

**PV Modules:** (60) 265 Wp PS-P60 (POLY-CRYSTALLINE) Philadelphia Solar.

**Inverters/Chargers:** (3) 6 kW Sunny Island H8.0 SMA.

**PV Inverters:** (3) 5 kW Sunny Boy SMA.

**DC Cables and Connectors:** 6 mm<sup>2</sup> DC cables (Red-Black) MC4 single/double connectors Helukabel.

#### Part two:

Size of the solar system 33 kW.

**Batteries:** (8) J185P-AC Flooded Deep Cycle 12V/205Ah Trojan Battery.

**PV Modules:** (60) 265 Wp PS-P60 (POLY-CRYSTALLINE) Philadelphia Solar.

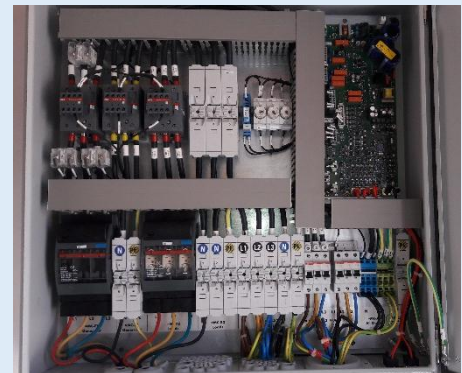
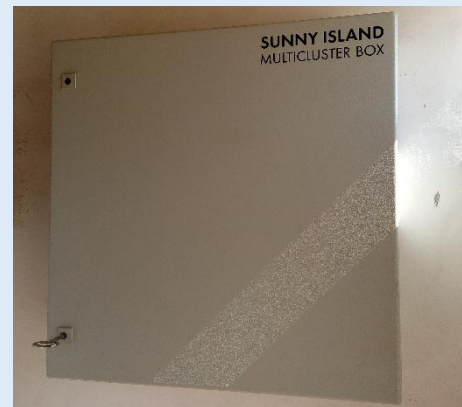
**Inverters/Chargers:** (3) 6 kW Sunny Island H8.0 SMA.

**PV Inverters:** (3) 5 kW Sunny Boy SMA.

**DC Cables and Connectors:** 10 mm<sup>2</sup> DC cables (Red-Black) MC4 single/double connectors Helukabel.

### Controlling:

It used Multi Cluster Box SMA to controlling the two part of system.



### Project Information:

Due to the rapidly increasing power disruptions, the Daar Alrubat had installed Off-Grid AC Coupling system to avoid that issue and keep supply of electricity for whole time. After the installation of the system they found a big difference and change positively. The system is operating 66 kW as maximum load for both buildings and working efficiently because of brand high quality components which solve the problem successfully that was occurred previously.