

# ARYA 8000

## General Specs Complete solar power system

Solar array	10800 W 10.8 KW
Average Energy produced in Caribbean	60 KWH Per day
Energy Storage Capacity	42.2 KWH
Inverter Capacity	8000 W 8 KW
Surge	16 kw

## HYBRID INVERTER

### PV String Input Data 1 unit 8000 W

Max.DC Input Power (W)	10400W
PV input Voltage (V)	370V (100V-500V)
MPPT Range (V)	125V-425V
Start-up Voltage (V)	125V
PV Input Current (A)	18A + 18A
No.of MPPTTrackers	2
No. of Strings Per MPPT Tracker	2+2

### AC. Output Data

Rated AC Output and UPS Power (W)	8000W
Max AC Output Power (W)	8800W
Peak Power(offgrid)	16000 W for 10S
AC Output Rated Current(A)	33.4A
Max.AC Current(A)	38.3A
Max Continuous AC Passthrough(A)	S0A
Output Frequency and Voltage	50/60Hz; 120/240Vac (Split Phase)
Grid Type	Split phase 2/3 phase
Current Harmonic Distortion	THD>3% (Linear load <1.5%)

### Efficiency

Max Efficiency	97.60%
Euro Efficiency	97.00%
MPPT efficiency	99.90%

### Protection

PV Arc Fault Detection	Integrated (Except European Type)
PV Input Lightning Protection	Integrated
Anti-islanding Protection	Integrated
PV String Input Reverse Polarity Protection	Integrated
Inulation Resistor Detection	Integrated
Residual Current Monitoring Unit	Integrated
Output Over Current Protection	Integrated
Output Shorted Protection	Integrated
Output voltage protection	Integrated

### Certifications and Standards

Grid Regulation	ULJ741,IEEE1547, RULE21 ,
Safety Regulation	IEC62109-1. IEC62109-2
EMC	EN61000-6-1. EN61000-6-3, FCC 15 class B



# BATTERY

**General Specs** 2 units 21 KWH each

Nominal Voltage (V)	48 V
Battery Chemistry	Lithium Ion
flattery Voltage Range (V)	40 v - 60 v
Max.Charging Current (A)	190A
Max.Discharging Current (A)	190A
Charging Curve	3 Stages/Equalization
External Temperature Sensor	Optional
Charging Strategy for Li-Ion Battery	Self adaptation to BMS

## Capacity

Nominal Capacity (Wh)	21 KWh
Usable Capacity (Wh)	19 KWh

## Physical size

Dimension (mm)	800*600*620 mm
Weight (Kg)	250 Kg

## Electrical parameters

Discharge Voltage (V)	45 ~ 53.5
Charge Voltage (V)	52.5 ~ 53.5
Recommend Charge/Discharge Current (A)	37
Max. Charge/Discharge Current (A)	74
Peak Charge/Discharge Current (A)	<a href="#">100A@15sec</a>

## General Specs

Communication	RS485, CAN
Working Temperature C	0~50 C Charge - 10 - 50 C Discharge
Humidity	5% ~ 85%
Certification	IEC62619 / CE / UN38.3 UL 1973 UL1642
Design life	10+ Years
Cycle Life	>6,000

# SOLAR PANEL

**Electrical Parameters** 36 Pcs 300 W each

Rated Maximum Power at STC (W)	300 W
Open Circuit Voltage VOC V	39.82v
Maximum power voltage VMP/V	32.51v
Short Circuit ISC/A	9.84a
Maximum power current IMP/A	9.23a
Module Efficiency %	18.44

## Working Parameters

Maximum system voltage	DC 1000V\
Operating Temperature	from negative 40 to positive 80 C
Maximum Fuse size	20 A
Application Class	A

## Mechanical Parameters

Weight	18 Kg
Dimension	1640*992*35 mm
No of cells	60
Connector	MC4 Compatible