

Spesifikasi Komponen PLTS

1. Modul Surya



Model Type	SW 250 Mono
Solar Cell Type	Monocrystalline
Maximum Power (P_{max})	250 Wp
Maximum Power Voltage (V_{mp})	28,5 V
Maximum Power Current (I_{mp})	6,44 A
Open-Circuit Voltage (V_{oc})	34,6 V
Short-Circuit Current (I_{sc})	6,68 A
Module Efficiency (%)	14,91%
Operating Temperature	-40°C to 85°C
Maximum System Voltage	60 V (USA NEC) / 1000 V (SC II)
Maximum Rate Current Series	16 A
Power Tolerance	-0 Wp / +5 Wp
Temperature Coefficients of P_{max}	-0,45% / K
Temperature Coefficients of V_{oc}	-0,30% / K
Temperature Coefficients of I_{sc}	-0,004% / K
Nominal Operating Cell Temperature	46°C
Bypass Diode	3
Junction Box IP Rating	IP65
Dimension	156 mm x 156 mm
Weight	21,2 Kg
Lifetime	25 years

2. Solar Charge Controller



Model Type	MPPT 150/35
Capacity	2 kWp
➤ V_{mp} of PV	48 – 150 V _{DC}
➤ V_{oc} of PV	≤ 145 V _{DC}
➤ Nominal Battery Voltage	48 V _{DC}
➤ Rated Charge Current	60 A
➤ Float Charging Voltage	13,8
➤ Self Consumption	0,001mA
➤ Charge Voltage 'absorption'	Default setting: 14,4/ 28,8/ 43,2/ 57,6 V (adjustable)
➤ Charge Algorithm	Multi stage adaptive
➤ Temperature Compensation	-16mV/ °C resp -32mV/°C
Battery	Deep Cycle Lead Acid (LA)
Efficiency	98%
Protection	➤ Battery reverse polarity (fuse, not user accessible) ➤ PV reverse polarity ➤ Output short circuit ➤ Over Temperature
Operating temperature	-30 to+60°C (full rated output up to 40°C)
Humidity	95% non-condensing
ENCLOSURE	
Colour	Blue (RAL 5012)
Power teminals	13 mm ² / AWG6
Protection category	IP43 (electronic components) IP22 (connection area)
Weight	1,25kg
Dimensions (h × w × d)	130 × 186 × 70 mm
STANDARDS	
Safety	EN/IEC 62190

3. Battery



Model Type	PLH-200FT	
Nominal Voltage	12 V	
Rated Capacity (Ah)	10hr	200 Ah @25°C to 1,80V/cell
	8hr	190 Ah @25°C to 1,75V/cell
	10hr	210 Ah @35°C to 1,80V/cell
	8hr	199 Ah @35°C to 1,75V/cell
Dimension	Length	562±3mm
	Width	125±2mm
	Height	329±3mm
	Total Height	320±3mm
Approx Weight	Approx 61,0 Kg	
Terminal	T11	
Container Material	ABS	
Max.Discharge Current	1500A (5s)	
Internal Resistance	Approx 3,0mΩ	
Operating Temp.Range	Discharge	-40~65°C
	Charge	0~40°C
	Storage	-20~40°C
Capacity affected by Temperature	40°C	106%
	35°C	105%
	25°C	100%
	0°C	86%
Self Discharge	PLH series batteries can be stored up to 24 months at 25°C and then a freshening charge is required. For higher temperatures the time interval will be shorter.	

4. Invertor



Model Type	SMA
Rated Power	3000VA/2400W
INPUT	
Voltage	230/220 VDC
Frequency Range	50 Hz/60 Hz (Auto sensing)
OUTPUT	
AC Voltage Regulation (Batt. Mode)	220VAC $\pm$ 5%
Surge Power	6000VA
Efficiency (peak)	93%
BATTERY & AC CHARGER	
Battery Voltage	48 VDC
Floating Charge Voltage	54 VDC
Overcharge Protection	62 VDC
SOLAR CHARGER & AC CHARGER	
Maximum PV Array Power	3000W
MPPT Range @ Operating Voltage	60VDC-115VDC
Maximum PV Array Open Circuit Voltage	145 VDC
Maximum Solar Charge Current	60A
Maximum AC Charge Current	10A/15A
Maximum Charge Current	60A
Maximum Efficiency	98%
Standby Power Consumption	2 W
PHYSICAL	
Dimension (D $\times$ W $\times$ H) mm	140 $\times$ 295 $\times$ 497
Net Weight (kgs)	11,5

Battery & Charger	
Nominal DC Voltage	48 V _{DC}
Maximum Battery Discharging Current	92 A
Maximum Charging Current	25 A
Physical	
Dimension	480 mm x 438 mm x 117 mm
Weight	15,57 Kg
Interace	
Communication Port	RS-232/USB
Intelligent Slot	Optional SNMP, Modbus and AS-400 cards available
Environment	
Protective Class	I
Ingress Protection Rating	IP20
Humidity	0 – 90% RH (No condensing)
Operating Temperature	0 to 40°C
Altitude	0 – 1000 m**