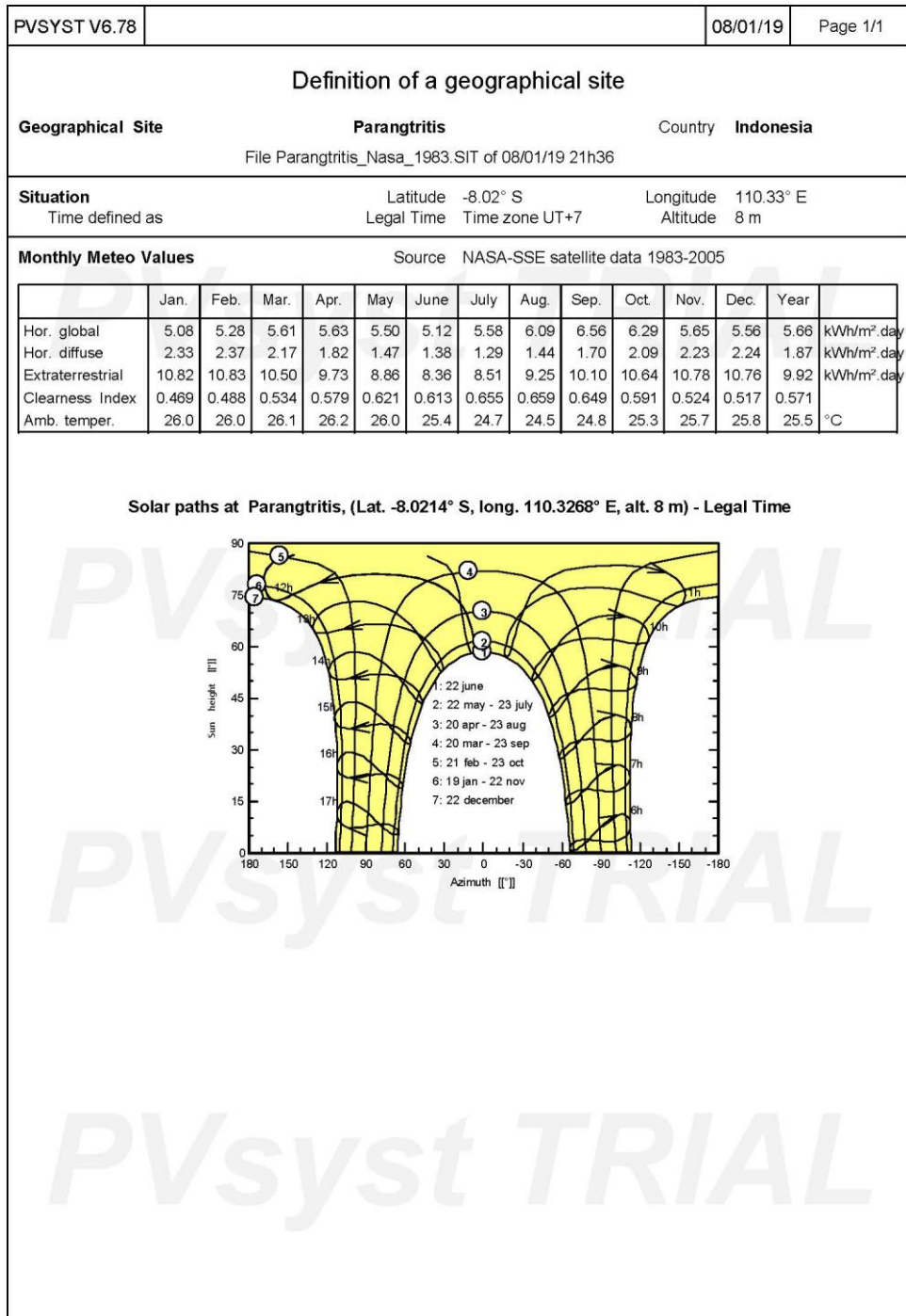


LAMPIRAN

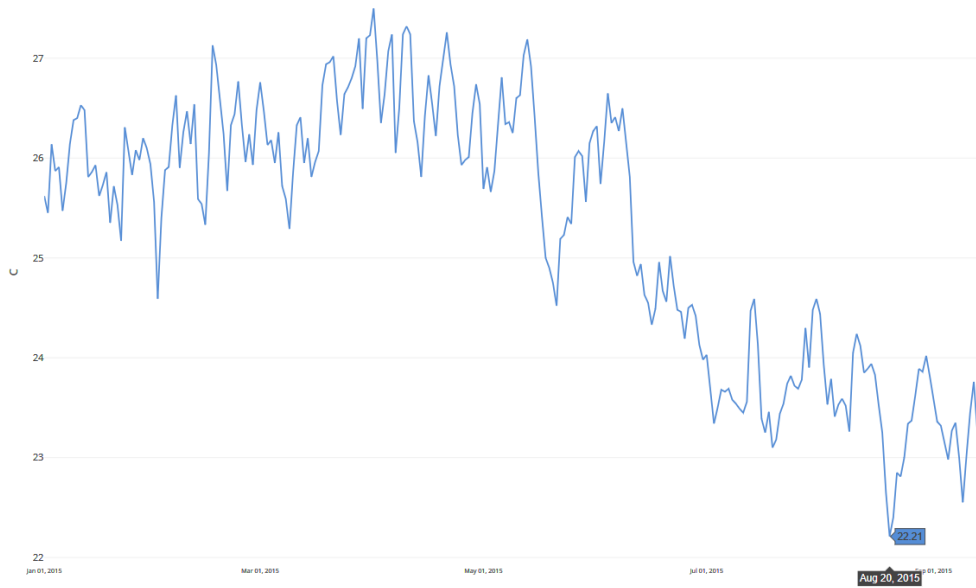
Lampiran 1. Data Geografi Lokasi

1. Nilai Iradiasi Lokasi

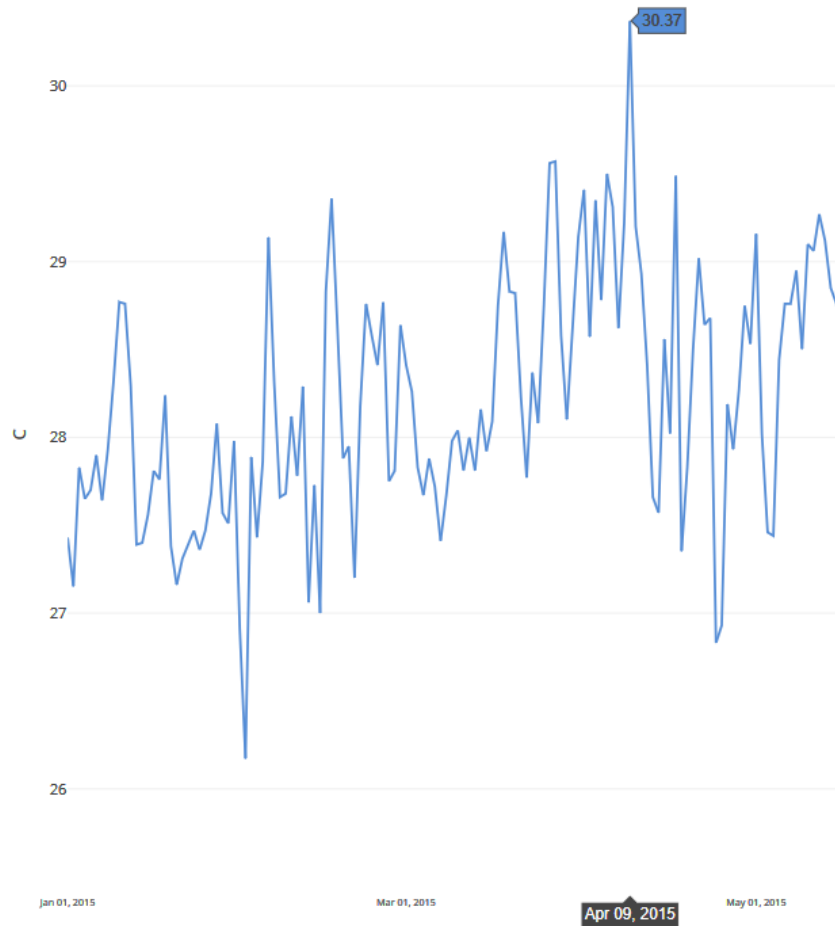


PVsyst Evaluation mode

2. Suhu Minimum Lokasi (22° C)



3. Suhu Maksimum Lokasi (30° C)



Lampiran 2. Data Jumlah Rumah dan Beban Listrik

1. Data Jumlah Rumah

**LAPORAN KEPENDUDUKAN DI KABUPATEN BANTUL
DESA
BULAN**

**PEMERINTAH KABUPATEN BANTUL
KECAMATAN : KRETEK**


**: PARANGTRITIS
: MARET 2018**

No.	DUSUN	Pend. Awal Bulan Ini		Lahir Bulan Ini		Mati Bulan Ini		Pindah Bulan Ini		Pendatang Bulan Ini		Pindah Bulan Ini		Pend. Akhir Bulan Ini		Jumlah			
		L	P	L	P	L	P	L	P	L	P	L	P	L	P				
1	Kretek	568	453	1021	1	0	1	1	0	1	0	2	2	0	3	3	568	452	1020
		K. Keluarga		321															321
2	Sono	403	392	795	0	0	0	1	1	0	0	0	0	0	0	0	403	391	794
		K. Keluarga		196															197
3	Samiran	418	488	906	0	0	0	1	0	0	0	0	1	0	0	417	487	904	
		K. Keluarga		252															252
4	Bungkus	348	346	694	0	0	0	1	1	2	1	2	3	0	0	348	347	695	
		K. Keluarga		182															182
5	Depok	266	292	558	0	1	1	0	1	1	0	0	0	1	0	265	292	557	
		K. Keluarga		121															121
6	Duwuran	223	227	450	0	0	0	1	0	1	0	0	1	2	3	221	225	446	
		K. Keluarga		122															122
7	Grogol VII	323	349	672	0	1	1	2	3	0	1	1	0	0	0	322	349	671	
		K. Keluarga		209															209
8	Grogol VIII	22	284	511	1	0	1	1	3	4	0	0	0	0	0	227	281	508	
		K. Keluarga		169															169
9	Grogol IX	218	279	497	1	0	1	0	0	0	1	4	5	0	0	220	283	503	
		K. Keluarga		146															146
10	Grogol X	212	234	446	0	0	0	0	1	1	0	0	0	0	0	212	233	445	
		K. Keluarga		164															164
11	Mancingan	679	719	1398	0	0	0	1	1	2	0	1	1	0	0	678	719	1397	
		K. Keluarga		630															631
Jumlah		Penduduk Akhir Bulan Ini		: 7940															
		Kepala Keluarga Akhir Bulan Ini		: 2514															

Keterangan : L : Laki-Laki (Jiwa)
P : Perempuan (Jiwa)
K. Keluarga : Kepala Keluarga
Jumlah : Laki-Laki + Perempuan

Parangtritis, 25 Januari 2019
Lurah / Kepala Desa Parangtritis

LURAH
DESA PARANGTRITIS



2. Data Beban Listrik

A. Rumah Tangga

Jenis Beban	Rumah 1	Rumah 2	Rumah 3	Rumah 4	Rumah 5	Hasil
Lampu 12W	3	5	4	3	3	5
Lampu 10W	1	-	1	1	-	1
Penanak Nasi	-	1	1	1	-	1
Televisi (TV)	1	1	1	1	1	1
Pompa Air	-	1	-	1	-	1
Setrika Pakaian	1	1	1	1	-	1

B. Warung dan Toko

Jenis Beban	Warung 1	Warung Makan 1	Warung 2	Warung 3	Warung 4	Hasil
Lampu 10W	2	2	2	2	-	2
Lampu 12W	1	2	1	1	2	2
Televisi (TV)	-	1	1	-	-	1
Kulkas (Showcase)	-	1	1	1	1	1

C. Tabel Acuan Kuota Energi SNI IEC 04-6394-2000

Table 6. Minimum Daily Energy Services [hours/day] to be supplied by the system

Load (Minimum Power [W])	Wh25	Wh50	Wh75	Wh100	Wh150	Wh200	Wh250	Wh300	Wh400	Wh500
Main Lighting (10 W)	2	2	2	3	4	4	8	12	16	20
Secondary Lighting (8 W)	0	2	2	2	2	2	4	6	10	10
TV (35 W)	0	0	1	1	2	3	3	3	4	5
Radio/Cassette Player (5 W)	1	2	1	2	2	3	3	3	4	5

Of course suppliers have the freedom to change the type of services they are offering. If, for example, there is no television reception in an area, the TV service may be replaced by lighting or radio. The number of service hours in Table 6 needs then be adjusted. The following conversion factors need to be taken:

Electrical Characteristics at Standard Test Conditions (STC)

Module Type	CSUN 300-60M	CSUN 295-60M	CSUN 290-60M
Maximum Power - Pmax (W)	300	295	290
Positive Power Tolerance	0~3%	0~3%	0~3%
Open Circuit Voltage - Voc (V)	39.8	39.6	39.5
Short Circuit Current - Isc (A)	9.60	9.54	9.47
Maximum Power Voltage - Vmpp (V)	32.2	32.0	31.9
Maximum Power Current - Imp (A)	9.31	9.22	9.10
Module Efficiency	18.48%	18.16%	17.86%

Standard test conditions (STC): Irradiance 1000W/m²; AM 1.5G; cell temperature 25°C. Measuring uncertainty of power is within ±3%.
Certified in accordance with IEC61215, IEC61730-1/2 and UL 1703.

Electrical Characteristics at Nominal Operating Cell Temperature (NOCT)

Module Type	CSUN 300-60M	CSUN 295-60M	CSUN 290-60M
Maximum Power - Pmax (W)	227	222	214
Open Circuit Voltage - Voc (V)	37.3	37.1	36.1
Short Circuit Current - Isc (A)	7.74	7.69	7.60
Maximum Power Voltage - Vmpp (V)	31.0	30.6	30.0
Maximum Power Current - Imp (A)	7.32	7.25	7.13

Nominal operating cell temperature (NOCT): Irradiance 800W/m²; wind speed 1 m/s; ambient temperature 20°C
Measuring uncertainty of power is within ±3%. Certified in accordance with IEC61215, IEC61730-1/2 and UL 1703.

Temperature Characteristics

Voltage Temperature Coefficient	-0.307%/K
Current Temperature Coefficient	+0.039%/K
Power Temperature Coefficient	-0.423%/K
NOCT	45 ±2°C

Maximum Ratings

Maximum System Voltage (V)	1500
Series Fuse Rating (A)	20

Mechanical Characteristics

Dimensions (L*W*H)	1640 x 992 x 35 mm
Weight	18.3 kg
Frame	Anodized aluminum profile
Front Glass	White toughened safety glass, 3.2 mm
Cell Encapsulation	EVA (Ethylene-Vinyl-Acetate)
Back Sheet	Composite film
Cells	6*10 pieces monocrystalline solar cells series strings (156*156mm)
Junction Box	Rated current ≥ 13A, IP ≥ 67, TUV & UL
Cable	Length 900 mm, 1x4 mm ²
Connector	Compatible with MC 4

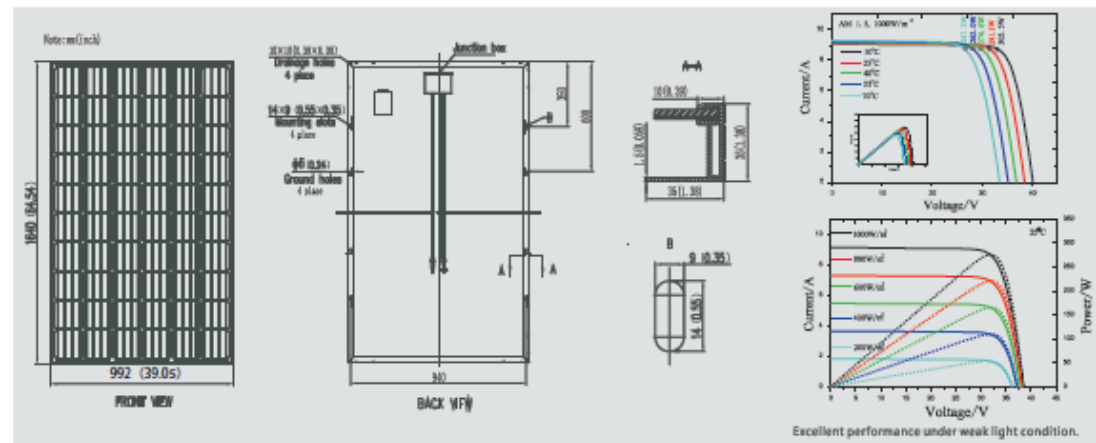
Packaging

Dimensions (L*W*H)	1700 x 1140 x1137 mm
Container 20'	360 pcs
Container 40'HC	896 pcs

System Design

Temp. Range	-40°C to + 85°C
Hail	Max. diameter of 25mm with Impact speed of 23m/s
Max. Capacity	Snow 5400 Pa, wind 2400 Pa
Application Class	A
Safety Class	II

Dimensions





PANEL SURYA
— Jakarta —

Panel Surya Solarland

Polycrystalline & Monocrystalline

SOLARLAND[®]
Solar Technology and Solutions



	Type	Pmax	Vmp	Imp	Voc	Isc	Size (mm)	Weight
Polycrystalline	80WP	80W	17.2V	4.65A	21.6V	5.17A	856 x 675 x 30	8.0Kg
	100WP	100W	17.2V	5.81A	21.6V	6.46A	1062 x 715 x 30	8.90Kg
	120WP	120W	17.2V	6.98A	21.6V	7.72A	1244 x 675 x 35	10.5Kg
	150WP	150W	17.2V	8.72A	21.6V	9.70A	1500 x 675 x 35	12.0Kg
	180WP	180W	34.4V	5.23A	43.2V	5.81A	1284 x 992 x 40	20.0Kg
	200WP	200W	34.4V	5.81A	43.2V	6.50A	1400 x 992 x 40	20.0Kg
Monocrystalline	100WP	100W	17.2V	5.81A	21.6V	6.46A	1195 x 541 x 30	7.8Kg
	150WP	150W	17.2V	8.72A	21.6V	9.70A	1500 x 675 x 35	12.0Kg
	200WP	200W	35.2V	5.69A	43.2V	6.09A	1580 x 808 x 40	16.5Kg
	300WP	300W	36.7V	8.17A	44.4V	8.99A	1956 x 992 x 45	24.0Kg

Applications

- Off grid residential roof-tops
- Off grid commercial/industrial roof-tops
- Rural area applications
- Solar power system
- Other off-grid/on-grid applications

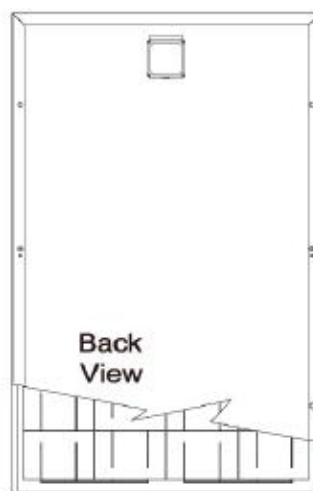
Standard & Quality Assurance:



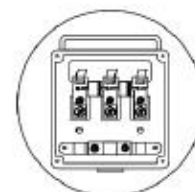
PANEL SURYA JAKARTA

Jl. Tembok Kayu Putih
Pulogadung - Jakarta Timur

www.panelsuryajakarta.com



Back View



Junction Box
Top View (Lid open)

Front View

Rolls

FLOODED DEEP CYCLE BATTERIES

6 CS 25P

6 VOLTS



CONTAINER: (INNER)	Polypropylene
COVER: (INNER)	Polypropylene - heat sealed to inner container
CONTAINER: (OUTER)	High Density Polyethylene
COVER: (OUTER)	High Density Polyethylene snap fit to outer container
TERMINALS:	Flag with stainless steel nuts & bolts
HANDLES:	Molded

WEIGHT DRY:	115 kg	254 Lbs.
WEIGHT WET:	144 kg	318 Lbs.
LENGTH:	559 mm	22 Inches
WIDTH:	286 mm	11 1/4 Inches
HEIGHT:	464 mm	18 1/4 Inches

PLATE HEIGHT:	273 mm	10.750 Inches
PLATE WIDTH:	143 mm	5.625 Inches
THICKNESS (POSITIVE):	6.60 mm	0.260 Inches
THICKNESS (NEGATIVE):	4.57 mm	0.180 Inches
POSITIVE PLATE DOUBLE WRAPPED WITH SLYVER ENVELOPED WITH HEAVY DUTY SEPARATOR		



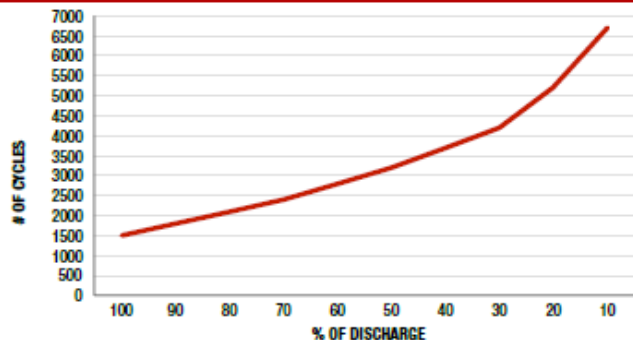
CELLS:	25 Plates/Cell	3 Cell
SEPARATOR THICKNESS:	3 mm	0.105 Inches
GLASS MAT INSULATION:	1 mm	0.020 Inches
ELECTROLYTE RESERVE: ABOVE PLATES	95 mm	3.75 Inches

COLD CRANK AMPS (CCA):	0°F / -17.8°C	2184
MARINE CRANK AMPS (MCA):	32°F / 0°C	2610
RESERVE CAPACITY (RC @ 25A):		1624 Minutes

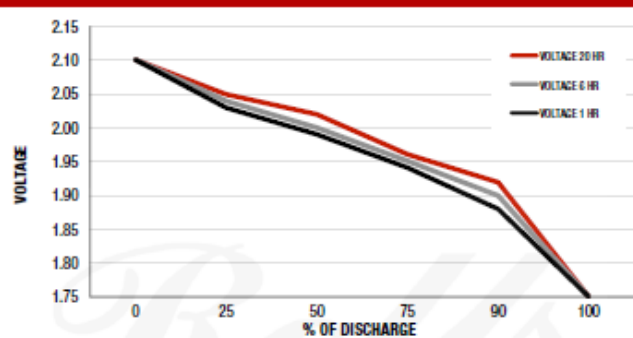
CAPACITY 820 AH

HOUR RATE:	SPECIFIC GRAVITY	CAPACITY / AMP HOUR	CURRENT / AMPS
@ 100 HOUR RATE	1.280	1156	11.56
@ 72 HOUR RATE	1.280	1091	15.15
@ 50 HOUR RATE	1.280	1009	20.17
@ 24 HOUR RATE	1.280	853	35.53
@ 20 HOUR RATE	1.280	820	41.00
@ 15 HOUR RATE	1.280	763	50.84
@ 12 HOUR RATE	1.280	713	59.45
@ 10 HOUR RATE	1.280	681	68.06
@ 8 HOUR RATE	1.280	640	79.95
@ 6 HOUR RATE	1.280	582	97.03
@ 5 HOUR RATE	1.280	549	109.88
@ 4 HOUR RATE	1.280	508	127.10
@ 3 HOUR RATE	1.280	459	153.07
@ 2 HOUR RATE	1.280	394	196.80
@ 1 HOUR RATE	1.280	279	278.80

CYCLE LIFE VS. DEPTH OF DISCHARGE



VOLTAGE VS. DEPTH OF DISCHARGE



Amphere Hour capacity ratings based on specific gravities of 1.280. Reduce capacities 5% for 1.265 specific gravity and 10% for specific gravities of 1.250

WWW.ROLLSBATTERY.COM
SPEC 01

SURRETTE BATTERY COMPANY 1 STATION RD SPRINGHILL, NS CANADA B0M 1X0
1/1/2014 REV. 1



DATA SHEET

SOLAR
TRUE DEEP-CYCLE INDUSTRIAL

MODEL **SIND 06 1225**
 VOLTAGE **6V**
 CAPACITY **1225Ah @ 100Hr**
 MATERIAL **Polypropylene** (internal cell container) **Polyethylene** (outer container)
 DIMENSIONS **Inches (mm)**
 BATTERY **Deep-Cycle Flooded/Advanced Lead Acid Battery**
 COLOR **Maroon**
 WATERING **Single-Point Watering Kit (Optional)**
 PRODUCT HIGHLIGHTS **Smart Carbon™ for Improved Performance**
17 Years Battery Life Based on IEC 61427



PRODUCT + PHYSICAL SPECIFICATIONS

Model	Terminal Type ^a	Dimensions ^a Inches (mm)			Weight ^d Lbs. (kg)	HydroLink or SPWK	Handles
		Length	Width	Height ^c			
SIND 06 1225	14	27.13 (689)	10.44 (265)	24.01 (610)	415 (188)	SPWK	Molded

ELECTRICAL SPECIFICATIONS

Voltage	Capacity ^a Amp-Hours (Ah)					Energy (kWh)
	10-Hr	20-Hr	48-Hr	72-Hr	100-Hr	
6V	835	942	1083	1159	1225	7.35

CHARGING INSTRUCTIONS

System Voltage	Charger Voltage Settings (at 77°F/25°C)			
	6V	12V	24V	48V
Maximum Charge Current (% of C ₂₀ Rate) ^b	13%			
Maximum Absorption Phase Time (hours)	4			
Absorption Voltage ^{**}	7.20	14.40	28.80	57.60
Float Voltage	6.75	13.50	27.00	54.00
Equalization Voltage	8.10	16.20	32.40	64.80

Do not install or charge batteries in a sealed or non-ventilated compartment. Constant under or overcharging will damage the battery and shorten its life as with any battery.
^aIf charging time is limited contact Trojan Technical Support for assistance.
^{**}In cases where controller has a bulk voltage setting, use absorption voltage setting above.



Designed in compliance with applicable BCI, DIN, BS and IEC standards. Tested in compliance to BCI and IEC standards.



Technical data	Sunny Central 500CP-US	Sunny Central 630CP-US	Sunny Central 720CP-US
Input (DC)			
Max. DC power (@ cos φ = 1)	560 kW	713 kW	808 kW
Max. input voltage ⁽¹⁾	1000 V	1000 V	1000 V
MPP voltage range (@ 25 °C / @ 50 °C at 60 Hz)	430 V - 820 V / 430 V - 820 V ⁽¹⁾⁽²⁾	500 V - 820 V / 500 V - 820 V ⁽¹⁾⁽²⁾	525 V - 820 V / 525 V - 820 V ⁽¹⁾⁽²⁾
Rated input voltage	480 V	550 V	565 V
Max. input current	1250 A	1350 A	1600 A
Min. input voltage / V _{MPP_min} at I _{MPP} < I _{OC_max}	429 V	498 V	515 V
Number of independent MPP inputs	1	1	1
Number of DC inputs: busbar / fuses	Busbar / 6 - 9	Busbar / 6 - 9	Busbar / 6 - 9
Output (AC)			
Rated power (@ 25 °C) / nominal AC power (@ 50 °C)	550 kVA / 500 kVA	700 kVA / 630 kVA	792 kVA / 720 kVA
Rated grid voltage / nominal AC voltage range	270 V / 243 V - 297 V	315 V / 284 V - 347 V	324 V / 292 V - 356 V
AC power frequency / range	50 Hz, 60 Hz / 47 Hz ... 63 Hz	50 Hz, 60 Hz / 47 Hz ... 63 Hz	50 Hz, 60 Hz / 47 Hz ... 63 Hz
Rated power frequency / rated grid voltage	50 Hz, 60 Hz / 270 V	50 Hz, 60 Hz / 315 V	50 Hz, 60 Hz / 324 V
Max. output current	1176 A	1283 A	1411 A
Max. total harmonic factor	< 3 %	< 3 %	< 3 %
Power factor at rated power / displacement power factor adjustable		1 / 0.8 leading ... 0.8 lagging	
Feed-in phases / connection phases	3 / 3	3 / 3	3 / 3
Efficiency ⁽³⁾			
Max. efficiency / European weighted efficiency / CEC efficiency	98.5 % / 98.3 % / 98.0 %	98.5 % / 98.3 % / 98.0 %	98.6 % / 98.4 % / 98.0 %
Protective devices			
DC disconnect device	DC contactor		
AC disconnect device	AC circuit breaker		
DC overvoltage protection	Surge Arrester Type II		
Grid monitoring	●	●	●
Ground-fault monitoring	○	○	○
Ungrounded PV array ⁽⁴⁾	○	○	○
Lightning protection	Lightning protection level III	Lightning protection level III	Lightning protection level III
Insulation monitoring	○	○	○
Surge arresters for auxiliary power supply	●	●	●
Protection class / overvoltage category	I / IV	I / IV	I / IV
General data			
Dimensions (W / H / D)	2562 / 2272 / 956 mm (101 / 90 / 38 inches)		
Weight	< 1870 kg (4123 lb)	< 1870 kg (4123 lb)	< 1870 kg (4123 lb)
Operating temperature range	-25 °C ... +50 °C / -13 °F ... +122 °F	-25 °C ... +50 °C / -13 °F ... +122 °F	-25 °C ... +50 °C / -13 °F ... +122 °F
Noise emission ⁽⁵⁾	60 db(A)	60 db(A)	60 db(A)
Max. self-consumption (in operation) ⁽⁷⁾ / self-consumption (at night) ⁽⁸⁾	< 1800 W / < 150 W	< 1800 W / < 150 W	< 1800 W / < 150 W
Auxiliary power supply via external 208 V / external 400 V / external 480 V / integrated green power	○ / ○ / ○ / ○	○ / ○ / ○ / ○	○ / ○ / ○ / ○
Cooling concept	OptiCool	OptiCool	OptiCool
Degree of protection: electronics / connection area	NEMA 3R / NEMA 3R	NEMA 3R / NEMA 3R	NEMA 3R / NEMA 3R
Degree of protection	4C2, 4S2	4C2, 4S2	4C2, 4S2
Application	In unprotected outdoor environments	In unprotected outdoor environments	In unprotected outdoor environments
Max. permissible value for relative humidity (non-condensing)	15 % ... 95 %	15 % ... 95 %	15 % ... 95 %
Max. operating altitude above mean sea level	2000 m	2000 m	2000 m
Fresh-air consumption (inverter)	3000 m ³ /h	3000 m ³ /h	3000 m ³ /h
Features			
DC connection	Ring terminal lug	Ring terminal lug	Ring terminal lug
AC connection	Ring terminal lug	Ring terminal lug	Ring terminal lug
HMI touchscreen	●	●	●
Communication / protocols	Ethernet (optical fiber optional), Modbus	Ethernet (optical fiber optional), Modbus	Ethernet (optical fiber optional), Modbus
Communication with Sunny String-Monitor	RS485	RS485	RS485
SCCOM	●	●	●
Color of enclosure, door, base, roof	RAL 9016 / 9016 / 7004 / 7004		
Warranty: 5 / 10 / 15 / 20 / 25 years	● / ○ / ○ / ○ / ○	● / ○ / ○ / ○ / ○	● / ○ / ○ / ○ / ○
Certificates and approvals (more available on request)	EMC conformity according to FCC, Part 15, Class A, UL 1741, UL 1998, IEEE 1547		
● Standard equipment ○ Optional features – Not available			
*Preliminary information, last updated June 2013			
Type designation	SC 500CP-US-10	SC 630CP-US-10	SC 720CP-US-10

ABB central inverters

PVS800

100 to 1000 kW



Technical data and types

Type designation	-0100kW-A	-0250kW-A	-0315kW-B	-0500kW-A	-0630kW-B	-0875kW-B	-1000kW-C
PVS800-57	100 kW	250 kW	315 kW	500 kW	630 kW	875 kW	1000 kW
Input (DC)							
Maximum input power ($P_{DC,max}$) ¹⁾	120 kWp	300 kWp	378 kWp	600 kWp	756 kWp	1050 kWp	1200 kWp
DC voltage range, mpp ($U_{DC,mp}$)	450 to 825 V	450 to 825 V	525 to 825 V	450 to 825 V	525 to 825 V	525 to 825 V	500 to 850 V
Maximum DC voltage ($U_{DC,max}$)	1000 V	1000 V	1000 V	1100 V	1100 V	1100 V	1100 V
Maximum DC current ($I_{DC,max}$)	245 A	600 A	615 A	1145 A	1230 A	1710 A	1710 A
Number of protected DC inputs	1 (+/-) / 4 ²⁾	2, 4, 8 (+/-)	2, 4, 8 (+/-)	4 to 15 (+/-)	4 to 15 (+/-)	8 to 20 (+/-)	8 to 20 (+/-)
Output (AC)							
Nominal power (P_{AC}) ³⁾	100 kW	250 kW	315 kW	500 kW	630 kW	875 kW	1000 kW
Maximum output power ⁴⁾	100 kW	250 kW	345 kW	600 kW	700 kW	1050 kW	1200 kW
Power at cosφ = 0.95 ⁵⁾	96 kW	240 kW	300 kW	475 kW	600 kW	830 kW	950 kW
Nominal AC current (I_{AC})	195 A	485 A	520 A	965 A	1040 A	1445 A	1445 A
Nominal output voltage (U_{AC}) ⁶⁾	300 V	300 V	350 V	300 V	350 V	350 V	400 V
Output frequency	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz
Harmonic distortion, current ⁷⁾	< 3%	< 3%	< 3%	< 3%	< 3%	< 3%	< 3%
Distribution network type ⁸⁾	TN and IT	TN and IT	TN and IT	TN and IT	TN and IT	TN and IT	TN and IT
Efficiency							
Maximum ⁹⁾	98.0%	98.0%	98.6%	98.6%	98.6%	98.7%	98.8%
Euro-eta ¹⁰⁾	97.5%	97.5%	98.3%	98.2%	98.4%	98.5%	98.5%
Power consumption							
Own consumption in operation	310 W	310 W	310 W	490 W	490 W	650 W	650 W
Standby operation consumption	60 W	60 W	60 W	65 W	65 W	65 W	65 W
External auxiliary voltage ¹¹⁾	230 V, 50 Hz	230 V, 50 Hz	230 V, 50 Hz	230 V, 50 Hz	230 V, 50 Hz	230 V, 50 Hz	230 V, 50 Hz
Dimensions and weight							
Width/Height/Depth, mm (W/H/D)	1030/2130/690	1830/2130/680	1830/2130/680	2630/2130/708	2630/2130/708	3630/2130/708	3630/2130/708
Weight appr. ¹²⁾	550	1100	1100	1800	1800	2320	2320

¹⁾ Recommended maximum input power

²⁾ Optional MCB inputs, 80 A inputs

³⁾ 100 and 250 kW units at 40 °C. 315 and 630 kW at 45 °C. 500, 875 and 1000 kW at 50 °C.

⁴⁾ At 25 °C. See the user manual for details.

⁵⁾ +/- 10%

⁶⁾ At nominal power

⁷⁾ Inverter side must be IT type

⁸⁾ Without auxiliary power consumption at min U_{DC}

⁹⁾ 115 V, 60 Hz optional

¹⁰⁾ For the smallest number of protected inputs. See the user manual for details.

FLEXmax 100 SPECIFICATIONS

10/2017

Model: FLEXmax 100	
Nominal Battery System Voltage	24VDC / 36VDC / 48VDC
Maximum Continuous Output Current	100A
Maximum Input Current (Short-Circuit)	64A
Maximum Array (STC Nameplate)	3000W / 4500W / 6000W (charging output limited to 100A at battery voltage)
Maximum PV System Voltage¹	300VDC
Operating Input Voltage Range²	30VDC to 290VDC
Standby Power Consumption	~2.5W
Power Conversion Efficiency	24V: 96% 48V: 97%
Peak Efficiency	24V: 97.5% 48V: 98.8%
Charging Regulation	Three-stage
Voltage Regulation Set Points	Absorption, float, silent and equalization
Equalization Charging	Programmable start time, voltage set point and duration, automatic termination when completed
Battery Temperature Compensation	Adjustable from 2mV/cell/°C to 6mV/cell/°C
Voltage Step-Down Capability	Down convert from any acceptable array voltage to any battery voltage (example: 72VDC array to 24VDC battery)
Programmable Auxiliary Control Output	12VDC output signal which can be programmed for different control applications (maximum of 0.25ADC)
Status Display	LED indicators
Remote Display and Controller	MATE3s compatible
Network Cabling	Proprietary network system using RJ-45 modular connectors
Data Logging	128 days
Operating Temperature Range³	Ambient, -25°C to 60°C (-13°F to 140°F), output power reduced above 25°C
Ingress Protection Rating	IP54
Enclosure Type	3R
Maximum Altitude Rating	10,000ft
Conduit Knockouts	Bottom and sides
Warranty	5 years
Weight (lb/kg)	Unit: 18.3 / 8.3 Shipping: 22 / 10
Dimensions H x W x D (In/cm)	Unit: 22 x 8.8 x 6 / 55.9 x 22.4 x 15.2 Shipping: 25.5 x 12 x 10 / 64.8 x 30.5 x 25.4
Options	Remote Temperature Sensor (RTS), HUB4, HUB10.3, MATE3s
Certifications	UL 1741, CSA C22.2 No. 107.1, IEC 62109-1
Minimum Battery Bank Size	100Ah
Charging Range (Output)	20VDC to 60VDC
Additional Features	Built-in GFCI, field-replaceable cooling fan

¹Highest open-circuit voltage before equipment damage. ²Operational limits. ³Derates to 50A at 60°C in a 48VDC system with 220VDC input. Lower input voltage improves thermal performance.

Available in four versions:

- TS-MPPT-60-600V-48: Standard
- TS-MPPT-60-600V-48-DB: with Disconnect Box
- TS-MPPT-60-600V-48-DB-TR: with DC Transfer Switch
- TS-MPPT-60-600V-48-DB-TR-GFPD: Pre-wired with Ground Fault Protection Device

Noteworthy features:

- Accommodates PV systems > 150 Voc with long wire runs from the array to the controller
- Uses Morningstar's patented 4-stage charging algorithm to optimize battery health
- Features extensive system networking, monitoring and communications
- Optimized for harsh environments and equipped with electronic protections
- Enables battery back-up for grid-tied systems using more efficient DC-coupling system topology (as opposed to AC-coupling typical from other brands)

Technical Specifications

Electrical	
Peak Efficiency	97.9%
Maximum Battery Current	60A
Maximum Input Operating Current	15A (self limiting)
Maximum Solar Open Circuit Voltage	600V
Nominal Maximum Operating Power ****	3200Wp, 48 Volt
Nominal System Voltage	48 Vdc custom programmable to 24V, 36V and 60V
Battery Operating Voltage Range	16-72Vdc
PV Input Operating Voltage Range	100V to Voc = 525V
Wind/Hydro Input Operating Voltage Range	Battery Voltage to 500V
Self-Consumption	1.75 - 2.50W
Transient Surge Protection	4500 Watts/port

Electrical Protections	
Input	Overload, high voltage
Battery	High voltage, battery sense disconnected, remote temperature sense disconnected
General Operation	High temperature, reverse current at night, lightning and transient surges

Mechanical	
Dimensions	Standard Version: 39.2 x 22.1 x 14.9 cm / 15.4 x 8.7 x 5.9 In DB & TR Version: 54.2 x 22.1 x 14.9 cm / 21.4 x 8.7 x 5.9 In
Unit Weight	Standard Version: 9.0 kg / 19.8 lbs DB & TR Version: 12.9 kg / 28.1 lbs
Maximum Wire Size	Power Terminals: 2.5 mm ² - 35 mm ² / 14 AWG - 2 AWG RT/Sense Terminals: 0.25 mm ² - 1.0 mm ² / 24 AWG - 16 AWG
Conduit Knockouts	M20; 0.50, 1.00, 1.25 Inches
Enclosure Rating	Type 1 (Indoor and vented), IP20

Environmental	
Ambient Temperature	-40 °C to +45 °C
Storage Temperature	-55 °C to +85 °C
Humidity	100% non-condensing
Tropicalization	Epoxy encapsulation, conformal coating, marine-rated terminals

Battery Charging	
Charging Stages	MPPT, absorption, float, equalize
Temperature Compensation	Coefficient: 5mV/°C/cell (25° ref) Range: 30 °C to +80 °C / -22 °F to +176 °F Set points: Absorption, Float, Equalize, HVD

Note: Remote Temperature Sensor is Included.

Communication	
Ports	Ethernet, EIA-485, RS-232, MeterBus
Supported Protocols	MeterBus, MODBUS RTU, MODBUS TCP/IP, HTTP, SNMP v2, SMTP

- Options:**
- TriStar 600V Meter (TS-M-2-600V)
 - TriStar Remote Meter (TS-RM-2)
 - Meter Hub (HUB-1)
 - Relay Driver (RD-1)
 - 600V Ground Fault Protection Device (GPD-600V)

- Certifications:**
- CE, RoHS, NEC Compliant
 - ETL Listed: UL-1741 and Canadian CSA C22.2 No. 107.1.01
 - FCC Class B Part 15 Compliant

Warranty: 5 year warranty period. Contact Morningstar or your authorized distributor for complete terms.

* Can be used as a 2-pole version of the Disconnect Box. ** See GFPD-600V datasheet for additional specifications. *** Can be replaced with 2-pole battery breaker. **** Input power can exceed Nominal Maximum Operating Power, but controller will limit and provide its rated continuous maximum output current into batteries. This will not harm the controller.

Device short name	MPPT 80 600
Electrical specifications	
Nominal battery voltage	24 and 48 V (Default is 48 V)
PV array operating voltage	195 to 550 V
Max. PV array open circuit voltage	600 V including temperature correction factor
Battery voltage operating range	16 to 67 VDC
Array short-circuit current	35 A (28 A @ STC)
Max. charge current	80 A
Max. and min. PV wire size in conduit	#6 AWG to #14 AWG (13.5 to 2.5 mm ²)
Max. output power	2560 W (nominal 24 V), 4800 W (nominal 48 V)
Charger regulation method	Three-stage (bulk, absorption, float) plus manual equalization Two-stage (bulk, absorption) plus manual equalization
Supported battery types	Flooded, GEL, AGM, Lithium-Ion, Custom
Efficiency	
Max. power conversion efficiency	94% (nominal 24 V), 96% (nominal 48 V)
General specifications	
Power consumption, night time	< 1 W
Battery temperature sensor	Included
Auxiliary output	Dry contact switching up to 60 VDC, 30 VAC, 8A
Enclosure material	Enclosure material: indoor, ventilated, aluminium sheet metal chassis Knockout Dimensions: 44.0 mm, 35.0 mm, 28.2 mm, and 22.2 mm knockouts for 1-1/4, 1, 3/4, and 1/2 Inch trade size fittings
IP degree of protection	IP20
Product weight	13.5 kg (29.8 lb)
Shipping weight	19.5 kg (43 lb)
Product dimensions (H x W x D)	76.0 x 22.0 x 22.0 cm (30.0 x 8.6 x 8.6 in)
Shipping dimensions (H x W x D)	113.39 x 28.68 x 31.90 cm (44.64 x 11.29 x 12.56 in)
Device mounting	Vertical wall mount
Ambient air temperature for operation	-20 °C to 65 °C (-4 °F to 149 °F), power derating above 45 °C
Storage temperature range	-40 °C to 85 °C (-40 °F to 185 °F)
Operating altitude	Sea level to 2000 m (6562 ft)
System network and remote monitoring	Available
Warranty	Five-year standard
Part number	865-1032
Regulatory approvals	
Safety	CSA certified (UL1741, CSA 107.1) and CE marked for the Low-voltage Directive (EN50178)
EMC	FCC and Industry Canada (Class B), CE marked for the EMC Directive (EN61000-6-1, -6-3), C-Tick compliant
Compatible products	
Conext XW+ inverter/charger (230 V)	XW 7048 E product no. 865-7048-61/XW 8548 E product no. 865-8548-61
Conext XW+ inverter/charger (120/240 V)	XW 5548 NA product no. 865-5548-01/XW 6848 NA product no. 865-6848-01
Conext SW (230 V)	SW 2524 product no. 865-2524-61/SW 4024 product no. 865-4024-61/SW 4048 product no. 865-4048-61
Conext SW (120 V)	SW 2524 product no. 865-2524/SW 4024 product no. 865-4024/SW 4048 product no. 865-4048
Conext System Control Panel	Product no. 865-1050-01
Conext Automatic Generator Start	Product no. 865-1060-01
Conext ComBox	Product no. 865-1058
Conext portable installation and configuration tool	Product no. 865-1155-01

Specifications are subject to change without notice.

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35 rue Joseph Monier
92500 Rueil-Malmaison, France
Tel : +33 (0)1 41 29 70 00
solar.schneider-electric.com

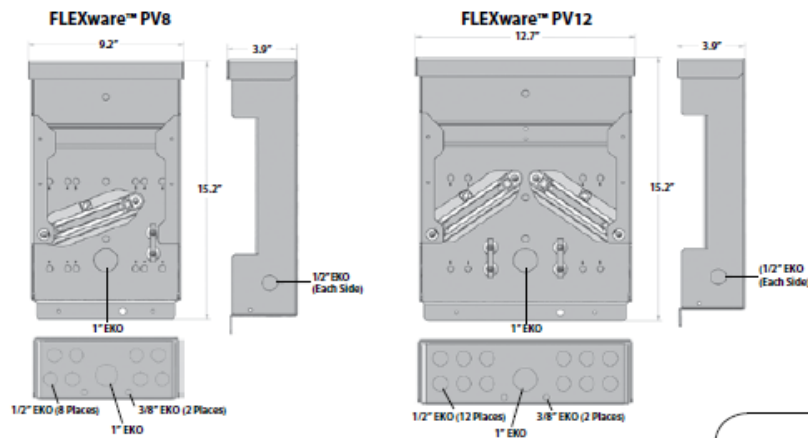
Life Is On

Schneider
Electric

FLEXware PV Combiner Box Specifications

	FWPV-8	FWPV-12	
Enclosure Material	Powder coated aluminum with stainless steel hardware	Powder coated aluminum with stainless steel hardware	
Mounting Options	Vertical wall mount, pole mount or sloped roof mount to 14 degrees incline (3 in 12 roof pitch)	Vertical wall mount, pole mount or sloped roof mount to 14 degrees incline (3 in 12 roof pitch)	
Enclosure Rating	Outdoor Rainproof, NEMA 3R	Outdoor Rainproof, NEMA 3R	
Enclosure Security	Padlock hole in chassis and cover for up to 3/8 inch padlock	Padlock hole in chassis and cover for up to 3/8 inch padlock	
Output Terminals	#14 - 2/0 AWG (2.08-67.4 mm ²) Two box lug terminals included	#14 - 2/0 AWG (2.08-67.4 mm ²) Two box lug terminals included	
Number of Separate Circuits	One Circuit	One or Two Circuits	
Number of 150VDC Breakers	Up to 8	Up to 12 (two groups of six)	
Number of 600VDC Fuse Holders	Up to 6	Up to 8 (two groups of four)	
Input Terminal	150VDC Breakers / #14 -6 AWG (2.08 - 13.3 mm ²)	150VDC Breakers / #14 -16 AWG (2.08 - 13.3 mm ²)	
Certifications	ETL Listed to UL1741, UL67, CSA22.2 #29	ETL Listed to UL1741, UL67, CSA22.2 #29	
Weight (lbs/kg)	Unit	4.4 / 2.0	5.9 / 2.7
	Shipping	5.5 / 2.5	7.4 / 3.3
Dimensions H x W x L (In/cm)	Unit	15.2 x 9.2 x 3.9 / 38.7 x 23.3 x 9.9	15.2 x 12.7 x 3.9 / 38.7 x 32.2 x 9.9
	Shipping	4.3 x 9.5 x 19 / 10.9 x 24.1 x 48.3	4.3 x 13 x 19 / 10.9 x 33 x 48.3

Specifications subject to change without notice



Available From:



Corporate Office:
5917 195th St. NE
Arlington, WA 98223 USA
Phone: (360) 435.6030
Fax: (360) 435.6019

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Wellington, FL 33414 USA
Phone: (561) 792.9651
Fax: (561) 792.7157

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02/12

Model:	MATE3s
Display	4.0 x 1.2" full graphical display
Quick System Access	5 system operation hot keys, 4 user programmable soft keys
Status Indicators	(9) LED indicators
Navigational Controls	5 navigational keys
Setpoint Adjustment	Touch sensitive scroll wheel
Communication Protocols	Proprietary OutBack communications protocol and SunSpec Modbus
Interconnect Cabling Included	Standard CAT5 network cable with RJ-45 modular jack - 6' (2m) included
PC Computer Interface	HTML system status dashboard over local intranet connection
Field Update Capability	Yes (includes Radian Series inverters/chargers and FLEMax Series charge controllers (rev 3.0 or higher))
Microprocessor	80MHz 32 bit processor
Set Point and Data Memory	8Mb RAM / 64Mb of flash RAM
Clock/Calendar	On-board real time clock with battery backup
Operating Temperature Range	0 to 50°C
Mounting	Surface-mount (various brackets available)
Environmental Rating	Indoor Type 1 (IP 30)
Maximum Cable Length	300' (100m)
Warranty	Standard 5 year Warranty
Weight (lb./kg)	Unit: 1.4 / 0.64 Shipping: 3.0 / 1.36
Dimensions H x W x D (in./cm)	Unit: 7.1 x 7.5 x 1.6 / 18 x 19 x 4.1 Shipping: 3.25 x 9 x 13.5 / 8.26 x 22.9 x 34.3

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It's a powerful advantage... the ability to see the electricity you produce and consume. To monitor and control your renewable energy system with the touch of a button from any internet connected device—anywhere in the world. Real-time status and hands-on control of your power flow and energy storage. Track individual system performance or manage a network of dispersed systems.



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AXS Port Specifications

03/2015

Model:	AXS Port
Power	Supplied by OutBack device
Status Indicators	Seven LED indicators
Clock	On-board real-time clock with battery backup
Internet Standards	TCP/IP, DNS, SMTP, FTP, DHCP, NTP
Ports	HUB10.3/Device: RJ-45 Communications: RJ-45 Temperature Sensor: RJ-11
Communication Protocol	Modbus TCP to the SunSpec standard
OutBack Device Interface	OutBack proprietary
PC Interface	10/100 Ethernet
Mounting	DIN clip (provided) or surface mounting
Environmental Rating	Indoor Type 1 (IP 30) non-condensing
Temperature Ranges	AXS Port: -40 to 75°C SD Card: -25 to 75°C
Weight (lb/kg)	Unit: 0.5 / 0.23 Shipping: 2.1 / 0.95
Dimensions H x W x D (in/cm)	Unit: 1.29 x 3.5 x 4.99 / 3.3 x 8.9 x 12.7 Shipping: 3.25 x 9 x 13.5 / 8.3 x 22.9 x 34.3
SD Card Size	MicroSD type 2 (2GB capacity)
Options	OutBack RMS
Certifications	FCC Part 15, subpart B, CE, RoHS, SunSpec

System Diagram



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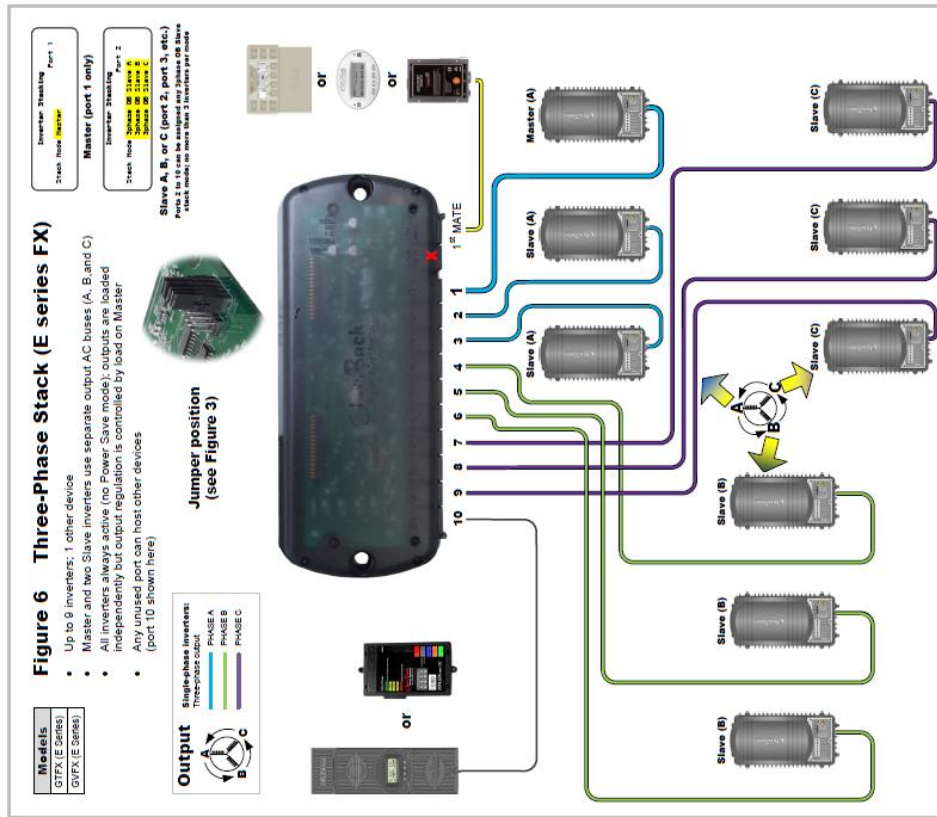
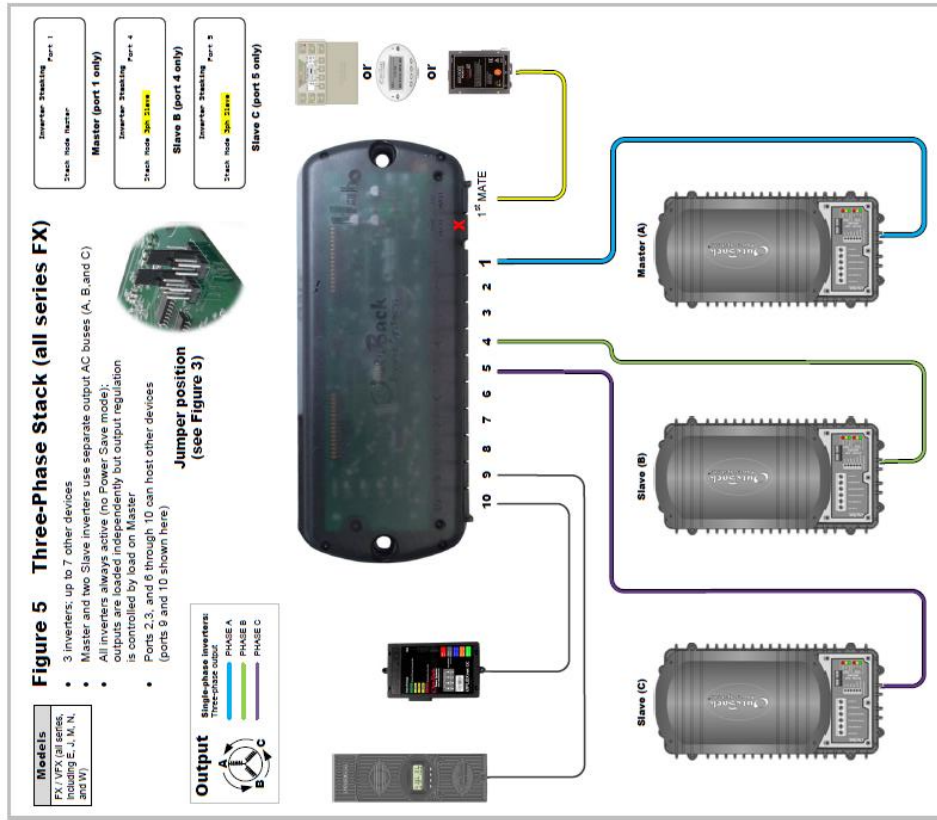
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Stacking (Three-Phase)

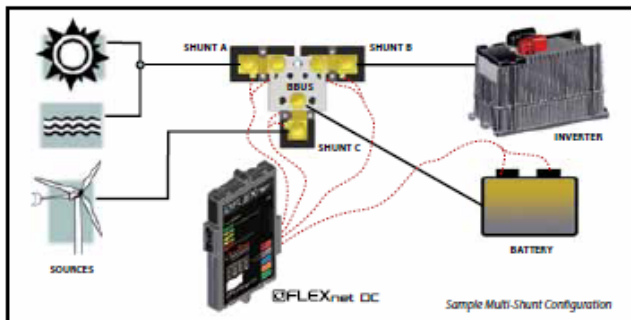


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FLEXnet-DC Specifications

Battery Voltage Input Range		8.0 to 80.0 VDC
Battery Voltage Resolution		0.1 VDC
Number of Current Channels		One to Three (each can be a Source or Load)
Current Range (Each Channel)		-1000.0 Amps to +1000.0 Amps DC
Current Resolution		0.1 Amps DC
State of Charge Display		0 to 100% (1% increments)
Aux Relay Configuration		SPST, Magnetic Latching Relay
Aux Relay Max Rating		5A @ 30 VDC
Current Shunt Type (order separately)		500A / 50mv
Display	Primary	MATE, MATE2 or MATE3
	Secondary	Five LED Indicators on front of FLEXnet DC
Battery AH Capacity Range		100 to 10,000 Amp Hours
Data Logging Memory		Most recent 128 Days
Programmable AUX Relay Settings	Battery Volts	Adjustable from 8.0 to 80.0 VDC
	State of Charge	Adjustable from 0 to 100%
	Time Delay	Adjustable from 0 to 240 Minutes
Accuracy		0.5% of Reading +/- 2 LSDs per channel
Operating Temperature Range		0 to 50°C / 32 to 122°F
Mounting		3/4" Panel Mount Breaker Slot or Surface Mount using Built-in Mounting Bars
Warranty		Standard 5 year
Weight	Unit	5 oz (.14 kg)
	Shipping	2 lbs (.91 kg)
Dimensions (H x W x L)	Unit	0.7 x 3.7 x 6.6" (1.9 x 9.4 x 16.8 cm)
	Shipping	2.1 x 9.0 x 11.5" (5.4 x 22.9 x 29.2 cm)

*Specifications subject to change without notice



Additional Available Data

- Total Battery Amps
- Averaged Battery Amps
- Averaged Battery Volts
- DC Amp-Hours IN Per Shunt
- DC Amp-Hours OUT Per Shunt
- DC kWh IN Per Shunt
- DC kWh OUT Per Shunt

- Last Cycle Amp Hours
- Last Cycle Watt Hours
- Last Cycle Amp Hour Charge Factor
- Last Cycle Watt Hour
- Charge Efficiency
- Total Number of Days Full
- Cumulative Battery Amp Hours Removed

Available From:



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11/12

DC CONNECTION BOX

REKA PANEL - DC Connection Box merupakan panel listrik yang mengintegrasikan beberapa komponen PLTS seperti Solar Charge Controller, Battery, dan Inverter.

Memiliki proteksi terhadap arus lebih untuk melindungi peralatan-peralatan yang terkoneksi tersebut dari kerusakan



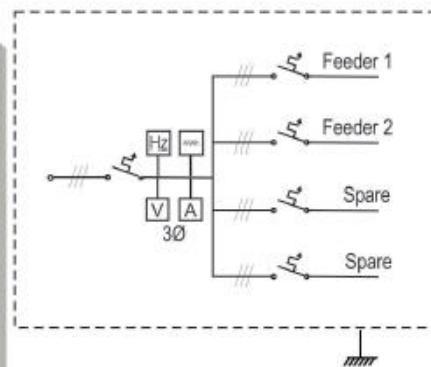
PANEL DISTRIBUSI *three phase*

PDB-xx03



REKAPANEL PDB-xx03 adalah panel distribusi 3 fasa, yang menghubungkan sumber pembangkit ke beberapa feeder sesuai dengan kebutuhan masing-masing feeder.

Dilengkapi dengan proteksi arus lebih, baik secara thermal maupun elektromagnetik. Proteksi Induksi Petir, juga dilengkapi dengan indikator/alat ukur tegangan per fasa dan arus tiap fasa serta frekuensi.




SPESIFIKASI

- | | |
|-------------------------------|--|
| 1. Capacity | = 10kVA - 500 kVA |
| 2. Input / Output Phase | = 3 phase |
| 3. Output Feeder (Customized) | = Network feeders, Local Feeder |
| 4. Metering (Customized) | = Voltage (Volts) and Current (Amps)
Frequency (Hz), Energy (kWh) |
| 5. Type | = Indoor , wall-mounted |
| 6. Material & Finishing | = Metal with Powder Coating |

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PANEL

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SMA Solar Inverters

FOB Reference Price: [Get Latest Price](#)


10 - 99 Kilowatts	100 - 499 Kilowatts	500 - 999 Kilowatts	>=1000 Kilowatts
\$200.00	\$185.00	\$170.00	\$155.00

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Payment: This supplier also supports L/C,T/T,Western Union,MoneyGram payments for offline orders.

Go Solar Solutions

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Overview

Quick Details

Place of Origin: United Kingdom	Brand Name: SMA
Solar Power (W): 5kw 10kw 15KW 50KW 100KW	Specification: Normal
Application: Commercial	Output Voltage (V): 110/120/220/230V
Load Power (W): 5kw 10kw 15KW 50KW 100KW	Work Time (h): 24 Hours

Supply Ability

Supply Ability: 10000 Kilowatt/Kilowatta per Week

Packaging & Delivery


Packaging Details: Standard


Port: Nhava Sheva


Lead Time (days): 2 Weeks


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SMA SC720CP Grid Tied Inverter 3-Ph 792kW



+ Larger Photo

Your Price: **\$200,031.00**
Watts 792,000
Cost per Watt (after tax credit) \$0.18

Qty:

ADD TO CART

+ Add To Wish List

Availability: Usually Ships in 4 to 6 Weeks
Product Code: SC720CP-US-10

Description

SMA Sunny Central 720CP Grid Tied Inverter, 3-Ph, 792KW, 324VAC, 60Hz, 480VDC, DC/AC Discon, 5 year warranty, RS485, Ethernet, SC-720CP-US-10. The Sunny Central CP-US series delivers outstanding performance for UL listed commercial and utility-scale solar installations. In combination with an external transformer, the Sunny Central CP-US can be connected with any utility grid while directly providing grid management features. The CP-US family is UL listed at 1,000 V DC and features an integrated AC disconnect in accordance with NEC 2011 requirements. Both the outdoor enclosure with the OptiCool cooling concept and the separate connection area ensures simple installation while maximizing returns. With a peak efficiency of 98.7 percent and CEC inverter efficiency of 98.5 percent, it outperforms all other inverters in its class. The Sunny Central CP-US can also be integrated with the Power Plant Controller as well as the Medium-voltage Power Platform for utility-scale applications. Order online or PHONE 888-498-3331

WANT A SOLAR PANEL SYSTEM AT THE LOWEST COST? **START SOLAR DESIGN**

Related Products...

SMA SC630CP Grid Tied Inverter 3-Ph 700kW
Your Price: **\$182,250.00**

SMA SC500HE grid tied inverter 3-Phase 500kW
Your Price: **\$134,223.00**

PV Powered inverter 260kW Commercial Grid Tied Inverter
Your Price: **\$99,999.00**

SMA SC750CP Grid Tied Inverter 3-Ph 825kW
Your Price: **\$205,464.00**

Add



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SMA SC500CP Grid Tied Inverter 3-Ph 550kW

SMA Solar Inverter Sunny Central 250kW

225kW 480Vac inverter Solectria SCI

250kW Solaron Commercial Grid Tie Inverter

Outback Power FlexMax FM100 Charge Controller



Outback Power:

- Trusted name in the renewable energy field, with a solid foundation in engineering
- World-class customer service and technical support

Model	Part No.	Battery Bank Voltage (Volts DC)	Max Current Output Per Controller	Size & Weight	Price
Outback Power FlexMax FM100 Charge Controller	3510610	24/36/48VDC	100A	22 x 8.8 x 6 in 18.3 lbs	\$975.00

Qty: **ADD TO CART**



Surrette Rolls 6-CS-25PS 1150Ah, 6V Deep Cycle Battery

Model: 6-CS-25PS

\$1,026.00

Surrette batteries have a minimum order requirement of 4 units. Ship via LTL freight.




Other products to consider

Battery Cables And Meter

- 
Battery Interconnects Cable 2/0 - Red/Black

\$10.00
- 
Battery Interconnects Cable 4/0 - Red/Black

\$17.00
- 
MidNite Solar MNBDM Battery Capacity Meter

\$60.00

Do you have any questions?

We will be happy to help, from product availability and shipping to technical inquiries and bulk pricing, click the button below.

Product information

The Rolls Surrette 6-CS-25P is a 6 volt deep cycle battery rated at 1,150 Ah @ 100 hours rate. This is a very high capacity battery with new generation series 5000 advantages and features like: dual case, replaceable cells, small foot print and an expected life of 10 years.

The high capacity, deep cycle Industrial Flooded batteries from Rolls Surrette feature a heavy duty plate grid, double insulated with a polyethylene envelope and a glass mat to protect against positive plate breakdown, as well as prevent treeing, cracked or misaligned separators, or shorting at the bottoms or sides of the battery.

The 2VDC cells are each built into their own lightweight, polypropylene container with a thermally bonded cover to prevent acid leakage, then placed within an outer container of durable polyethylene with a removable lid, ensuring that the battery is operable and unspilled, even if the outer case is damaged.

Outback Power Hub-4 OutBack Power



Outback Power:

- Trusted name in the renewable energy field, with a solid foundation in engineering
- World-class customer service and technical support

Model	Part No.	Description	Size & Weight	Price
Outback Power Hub-4 OutBack Power	9500252	Outback HUB-4 Communication Manager	10.4 x 4 x 1.4 in 2.1 lbs	<input type="text" value="1"/> \$152.00 <input type="button" value="Add to Cart"/>

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OUTBACK POWER MATE3S SYSTEM DISPLAY AND CONTROLLER



\$425.00 List price \$595.00

★★★★★ Customer Reviews (3)

1

Estimate Shipping



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- ADD-ONS
- REVIEWS

Item code	Brand name	Model number
OUTMATE3S	Outback	MATE3s

Outback Power Mate3s Advanced System Display and Controller

The new MATE 3s System Display and Controller has the same advanced functionality and interface found in MATE3, but now makes it easier than ever to program and monitor a complete Outback Power system. System setup and programming is quick and easy.

IMPROVEMENTS INCLUDE:

- Updated design with dark grey color to fit within OutBack design standards
- Improved OPTICS RE connectivity
- Support for UL1741 SA compliant inverters

FEATURES:

- Program, manage and monitor entire system from any internet-connected device with OPTICS RE (firmware comes pre-loaded*)
- Intuitive menu structure and easy-to-read graphical display
- System configuration wizard
- Built-in clock and calendar function
- FLEXtime setting enables working with time-of-day power rates
- Field-upgradeable to accommodate new features
- Up to 1-year of data logging
- SD memory card slot
- Surface mount (see Mounting Bracket options in Addons below)
- 5 Year Warranty

*NOTE: The MATE3s can be updated to the latest revision by installing the latest firmware. Firmware can be updated by ordering an SD card, or by downloading [here](#).



Outback Power FLEXnet DC System Monitor



Outback Power:

- Trusted name in the renewable energy field, with a solid foundation in engineering
- World-class customer service and technical support

Model	Part No.	Description	Size & Weight	Price
Outback Power FLEXnet DC System Monitor	9541875	Outback Flexnet FN-DC System Monitor	6.60 x 3.75 x .74 in .95 lbs	<div style="text-align: right;"> <small>Installer ?</small> \$278.00 </div>
				<div style="text-align: right;"> <input type="text" value="1"/> <input type="button" value="Add to Cart"/> </div>

SHOP ALL PRODUCTS

Store / Inverters / Inverter Accessories / Outback Inverter Accessories

OUTBACK AXS MODBUS/TCP INTERFACE DEVICE- PORT



\$282.43 List price \$350.00

1 +ADD Estimate Shipping

DETAILS	DOCUMENTS	ADD-ONS	REVIEWS
Item code	Brand name	Model number	
OUTAXS-PORT	Outback	AXS Port	

Outback Power Systems
AXS Port
Modbus/TCP Interface

Please Note: This product is for use instead of a system display such as the MATE3. OutBack does not support the use of the AXS Port and a system display at the same time.

Targeting industrial and commercial customers, the SunSpec compliant AXS Port Modbus/TCP Interface provides advanced connectivity with OutBack FLEXmax™ charge controllers as well as other OutBack devices, enabling remote system status monitoring, command and control. With the AXS Port Interface, users can securely access an OutBack power system anywhere in the world via an Ethernet connection using Modbus Transmission Control Protocol (TCP), and communicate directly to a single device, or to multiple devices using OutBack's HUB4 or HUB10 communications management components.

Outback Power FWPV-12





- Outback Power:
- Trusted name in the renewable energy field, with a solid foundation in engineering
 - World-class customer service and technical support

Model	Part No.	Amps	Volts AC	Volts DC	Size & Weight	Price
Outback Power FWPV-12	8530145			600VDC	15.2 × 3.9 × 12.7 in 5.9 lbs	<div style="display: flex; align-items: center;"> <div style="margin-right: 10px;"> </div> <div style="margin-right: 10px;"> <p>Qty</p> <p>1</p> </div> <div style="margin-right: 10px;"> <p>Add to Cart</p> </div> <div> <p>\$254.00</p> <p>Item is not returnable.</p> </div> </div>



PANEL LISTRIK-PANEL DISTRIBUSI [REKAPANEL-PDB] PDB150K03

PANEL LISTRIK-PANEL DISTRIBUSI [PDB150K03] , 150 kVA, 3 Phase, 2 output Feeder, 1 local feeder, Freq, Volt, Amp, kWh, Arrester . Tipe Indoor, Material Metal, Finishing Powder Coating

BRAND-TIPE	 REKAPANEL-PDB
CODE	23142-150K03
VOL/BERAT	0.2 m3/12 kg
GARANSI	

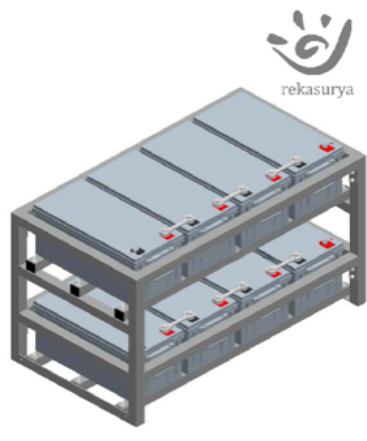
Rp. **55.825.000,- ***

- Harga yang tercantum merupakan harga PRICELIST PROYEK
- Terdapat DISKON TAMBAHAN 5%- 50% untuk JENIS PRODUK TERTENTU & KUANTITI TERTENTU
- Menyediakan Surat Dukungan, Surat Garansi, Sertifikat Produk, dan dokumen pendukung lainnya untuk keperluan TENDER

Rp. **55.825.000,- ***

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Jual Panel Combiner box, Panel baterai, panel distribusi PLTS



MEKANIKAL-BATTERY SUPPORT [RAK BATERAI] RB1000-0224T

MEKANIKAL-BATTERY SUPPORT [RB1000-0224T], untuk baterai 3000Ah 1 bank, 24 Pcs, Finishing Cat Semprot, Rak tunggal, ketinggian min 15cm dari lantai

BRAND-TIPE	
CODE	39125-RB1000-0224T
VOL/BERAT	0.2 m3/70 kg
GARANSI	

Rp. **4.675.000,- ***

- Harga yang tercantum merupakan harga PRICELIST PROYEK
- Terdapat DISKON TAMBAHAN 5%- 50% untuk JENIS PRODUK TERTENTU & KUANTITI TERTENTU
- Menyediakan Surat Dukungan, Surat Garansi, Sertifikat Produk, dan dokumen pendukung lainnya untuk keperluan TENDER

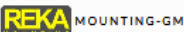

Rp. **4.675.000,- ***

- Harga yang tercantum merupakan harga PRICELIST PROYEK
- Terdapat DISKON TAMBAHAN untuk JENIS PRODUK TERTENTU & KUANTITI TERTENTU
- Menyediakan Surat Dukungan, Surat Garansi, Sertifikat Produk, dan dokumen pendukung lainnya untuk keperluan TENDER



**SUPPORT MODULE-GROUND MOUNTED [MOUNTING-GM]
SPGM10000HDG**

SUPPORT MODULE-GROUND MOUNTED [SPGM10000HDG], 10kWp, Metal Galvanized Ground Mounted, kemiringan 5-10 derajat

BRAND-TIPE	
CODE	31048-SPGM10000HDG
VOL/BERAT	6.4 m ³ /600 kg
GARANSI	

Rp. 41.888.000,- *)

- Harga yang tercantum merupakan harga PRICELIST PROYEK
- Terdapat DISKON TAMBAHAN 5%- 50% untuk JENIS PRODUK TERTENTU & KUANTITI TERTENTU
- Menyediakan Surat Dukungan, Surat Garansi, Sertifikat Produk, dan dokumen pendukung lainnya untuk keperluan TENDER

Rp. 41.888.000,- *)

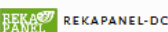

- Harga yang tercantum merupakan harga PRICELIST PROYEK
- Terdapat DISKON TAMBAHAN untuk JENIS PRODUK TERTENTU & KUANTITI TERTENTU
- Menyediakan Surat Dukungan, Surat Garansi, Sertifikat Produk, dan dokumen pendukung lainnya untuk keperluan TENDER

jual bracket panel surya, jual support module



PANEL LISTRIK-DC CONNECTION BOX [REKAPANEL-DC] DCB25006

PANEL LISTRIK-DC CONNECTION BOX [DCB25006], Input 4-6 String, Include DC Isolating Switch Size NT01.6P 250A. Tipe Indoor, Material Metal, Finishing Powder Coating

BRAND-TIPE	
CODE	23065-25006
VOL/BERAT	0.2 m ³ /12 kg
GARANSI	

Rp. 7.392.000,- *)

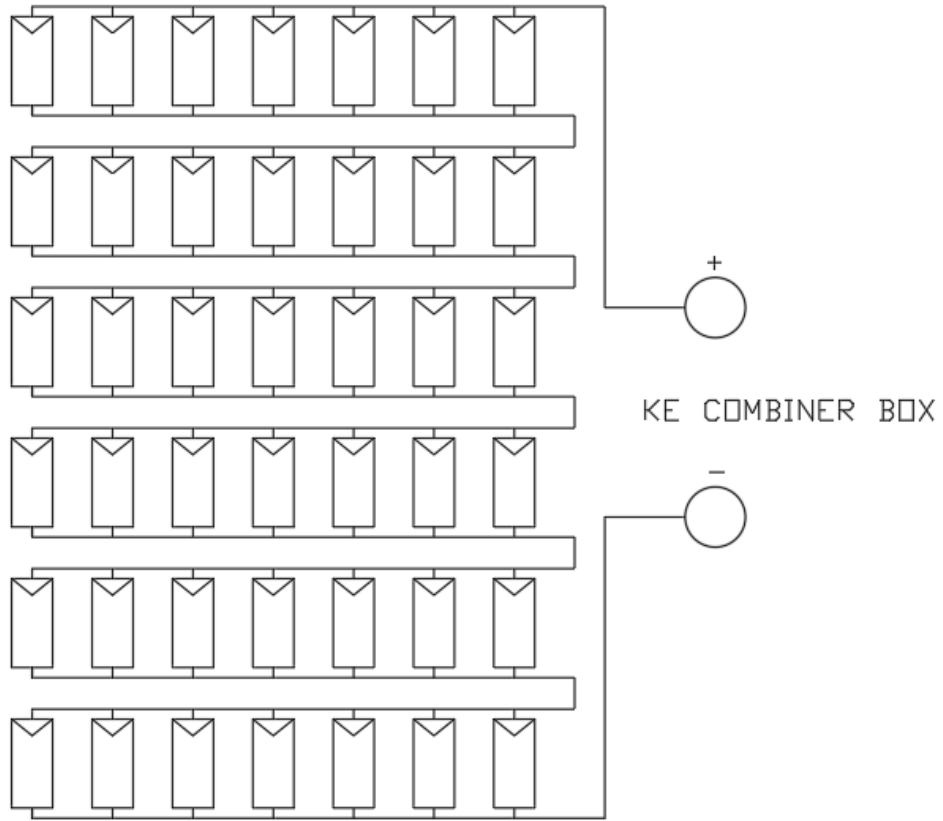
- Harga yang tercantum merupakan harga PRICELIST PROYEK
- Terdapat DISKON TAMBAHAN 5%- 50% untuk JENIS PRODUK TERTENTU & KUANTITI TERTENTU
- Menyediakan Surat Dukungan, Surat Garansi, Sertifikat Produk, dan dokumen pendukung lainnya untuk keperluan TENDER

Rp. 7.392.000,- *)

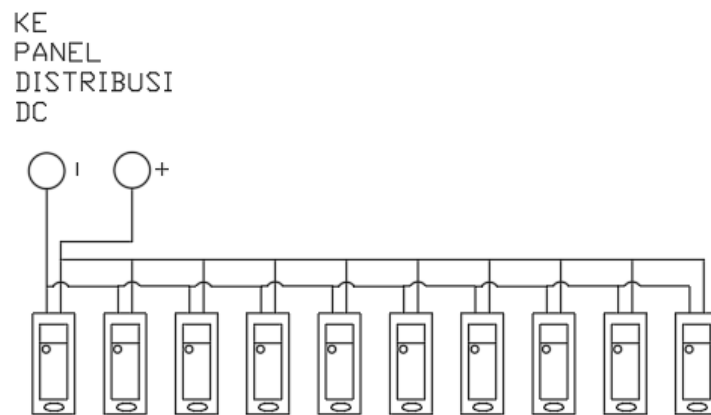
- Harga yang tercantum merupakan harga PRICELIST PROYEK
- Terdapat DISKON TAMBAHAN untuk JENIS PRODUK TERTENTU & KUANTITI TERTENTU
- Menyediakan Surat Dukungan, Surat Garansi, Sertifikat Produk, dan dokumen pendukung lainnya untuk keperluan TENDER

Lampiran 5. Gambar Pendukung

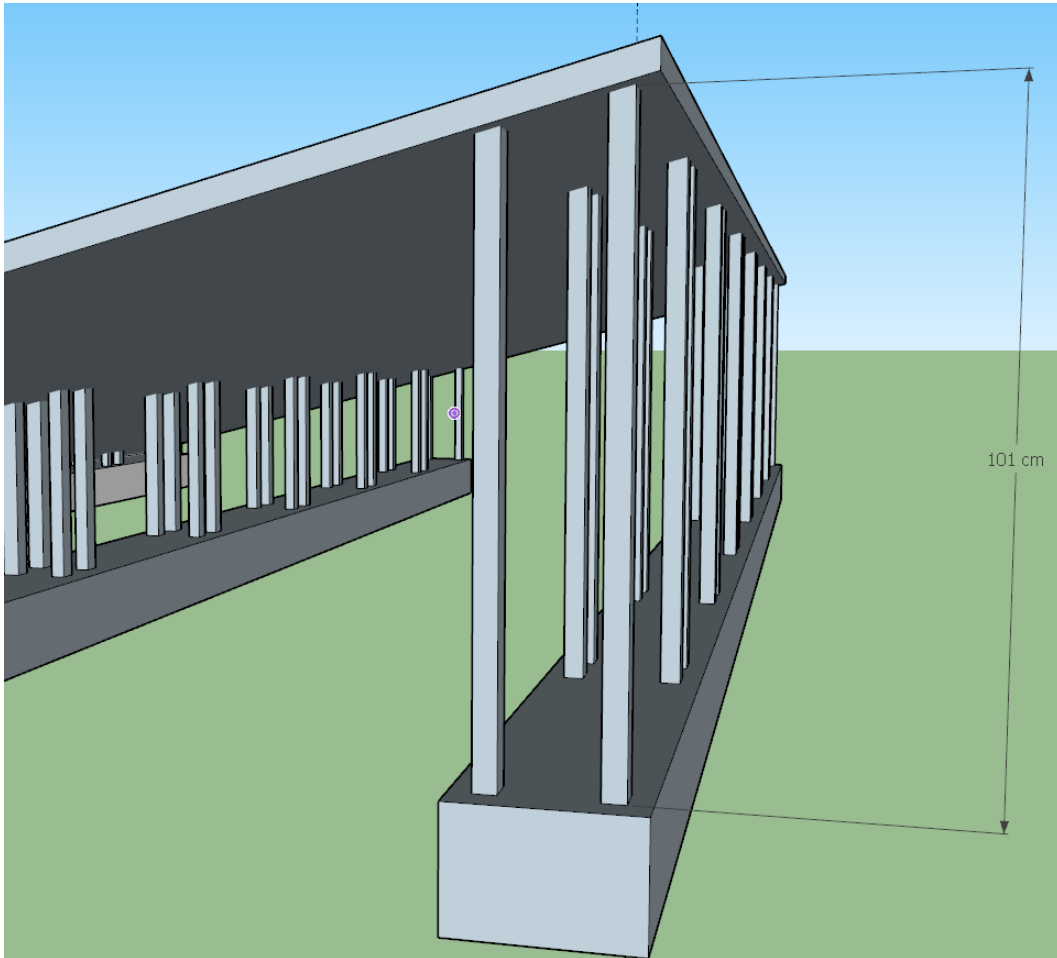
1. PV Array ke Combiner Box



2. Solar Charge Controller ke Panel Distribusi DC



3. Ketinggian Array



4. Gambar Array Panel Surya

