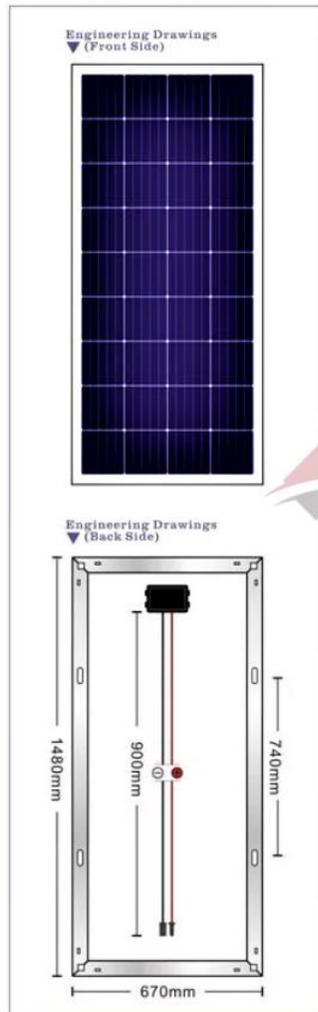


LAMPIRAN

Lampiran 2 spesifikasi panel surya

25 year
power output
warranty
P150W



Technical Parameters

Electrical Parameters	Model	P150A36
Rated Maximum Power		150Wp
Power Tolerance		0~+5W
cell efficiency		17.2%
Maximum Power Voltage (Vmp)		18.13V
Maximum Power Current(Imp)		8.27A
Open Circuit Voltage(Voc)		21.12V
Short Circuit Current(Isc)		9.06A

Mechanical Parameters	
Dimensions	1480*670*35mm
weight	11.0Kg
Cell Technology	Poly-Si 156*156mm/4*9
Glass	3.2mm Tempered Glass
encapsulation	EVA
Backplane	Multilayer Composite
Aluminum-frame	Silvery Anodized Aluminium Alloy
Junction-box	IP65/IP67
Cable	2.5mm ² ,900mm
Connector	MC4 and Mc4 Compatible

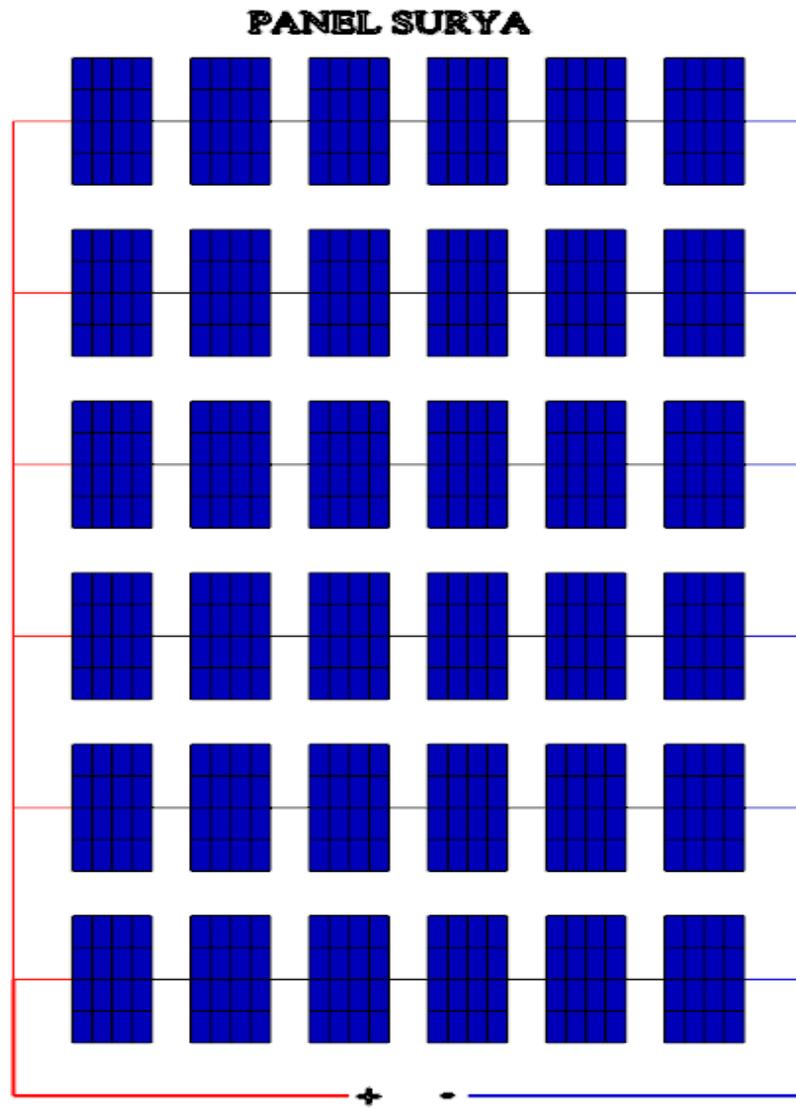
Performance Parameters	
Maximum System Voltage	DC 1000V
Maximum Series Fuse Rating	15A
Operating Temperature	-45~+80°C
Temperature Coefficient of Isc	+0.06%
Temperature Coefficient of Voc	-0.32%
Temperature Coefficient of Pmp	-0.45%
Maximum Load(Wind/Snow)	2400Pa/5400Pa
Applications Class	Class A

Package Parameters	
Package Configuration	2pcs/CTN
Package Dimensions	1495*685*85mm
Package Gross weight	24.0Kg

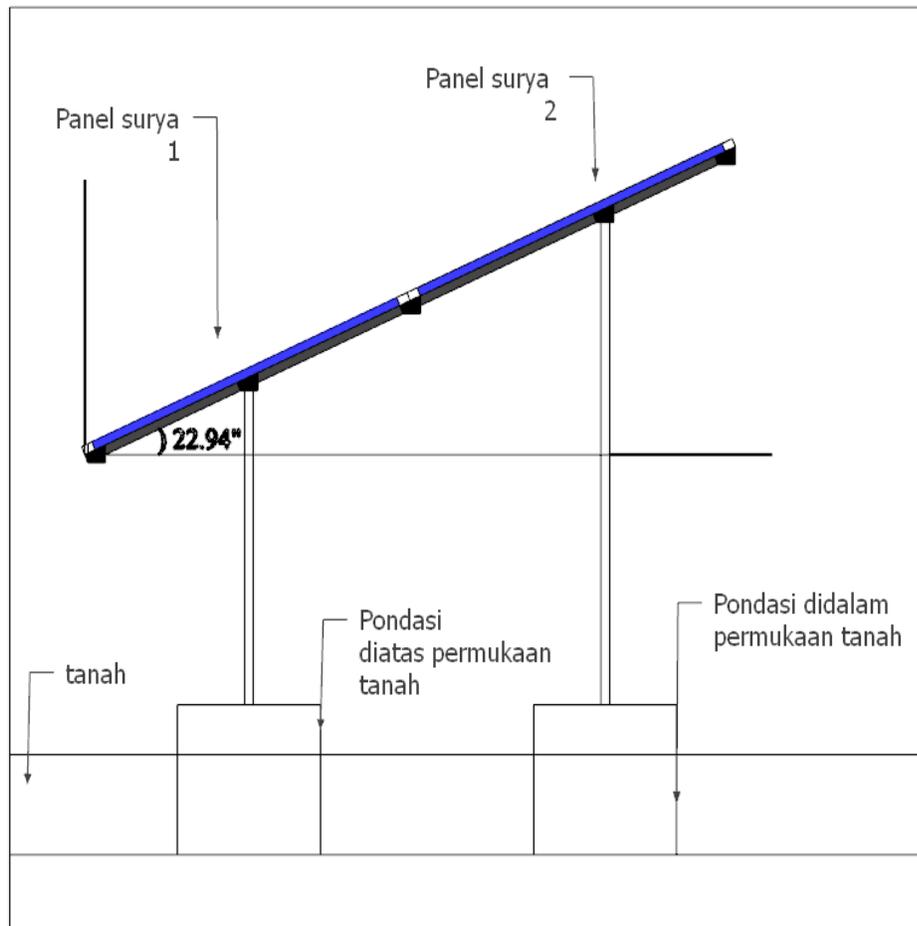
STC: Irradiance 1000W/m², Cell Temperature 25°C, Spectrum AM:1.5

10-years 90% of Min. rated output power, and 25-years 80% of Min. rated output power warranty

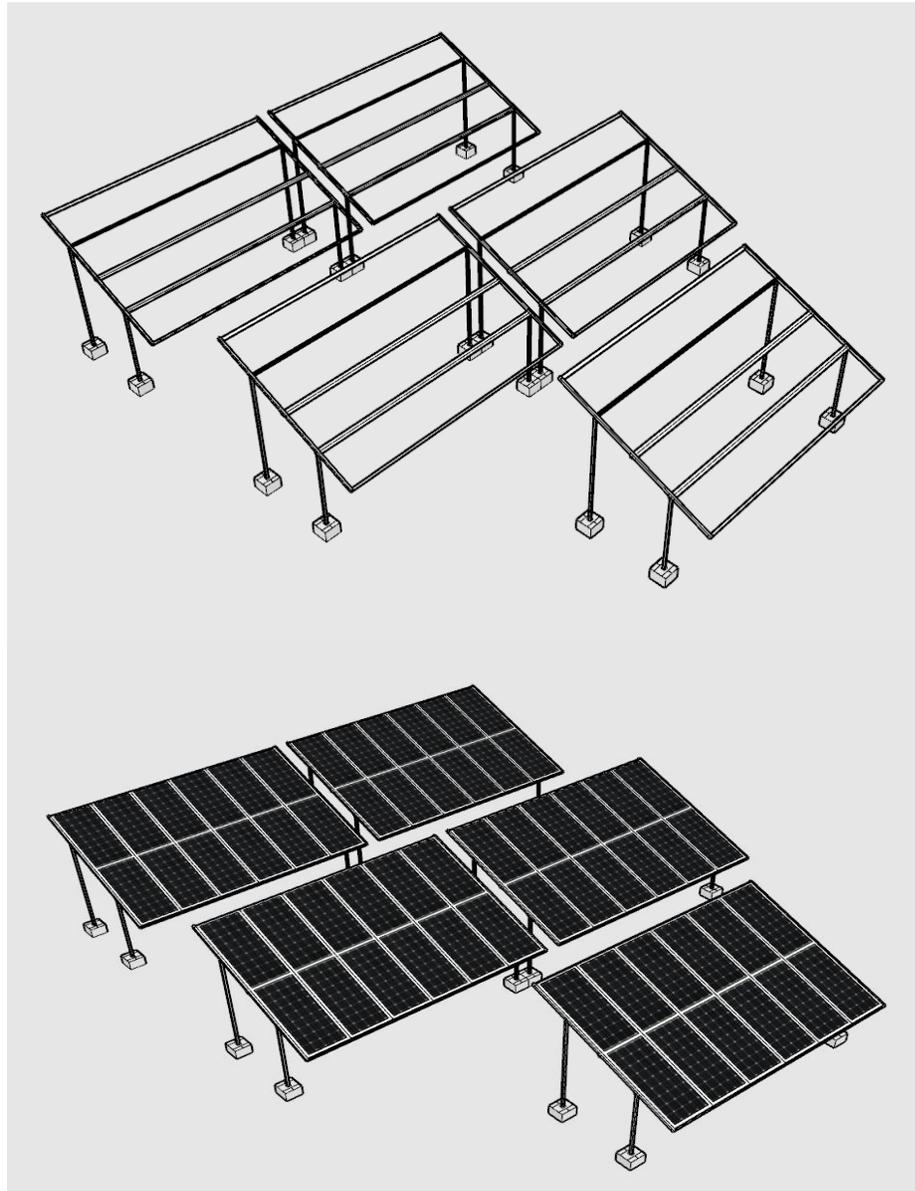
Lampiran 3 Instalasi seri-paralel panel surya



Lampiran 4 Kontruksi kemiringan panel surya

**KONTRUKSI KEMIRINGAN PANEL SURYA
22.94°**

Lampiran 5 desain kontruksi panel surya



Lampiran 6 Spesifikasi baterai & Instalasi seri-paralel baterai

SPECIFICATIONS

VOLTAGE AND CAPACITY
36V 2268 Wh

SIZE
20.6" x 9.3" x 8.66"
(522 x 238 x 220 mm)

WEIGHT
59 lbs (26.7 Kg)

STORAGE CAPACITY
63 Ampere Hours

TERMINALS
F12 terminals. Bolt size - M8

LIFESPAN/LIFECYCLES
Up to 80% capacity for 2,000 cycles in recommended conditions.

DISCHARGE
60 A max continuous,
100 A max 10-second pulse
9.0 V max discharge,
11.0 V max recommended discharge

CHARGE
31.5 A max.
LiFePO4 charger recommended.
A SLA charger may work, but will reduce performance and lifespan of the battery.

OPERATING TEMPERATURE
- 20°F min, +120°F max environmental operating temps.

Avoid charging below 32°F

SAFE & RELIABLE
All batteries include an active BMS (Battery Management System) protection circuit that handles cell balancing, low voltage cutoff, high voltage cutoff, short circuit protection and temperature protection for increased performance and longer life.

CERTIFICATIONS
All batteries meet UN 38.3 Standards. Dakota Lithium's cells are UL1642 certified and have been tested per IEC62133 standards. Meets all US and International regulations for air, ground, train, and marine transport.

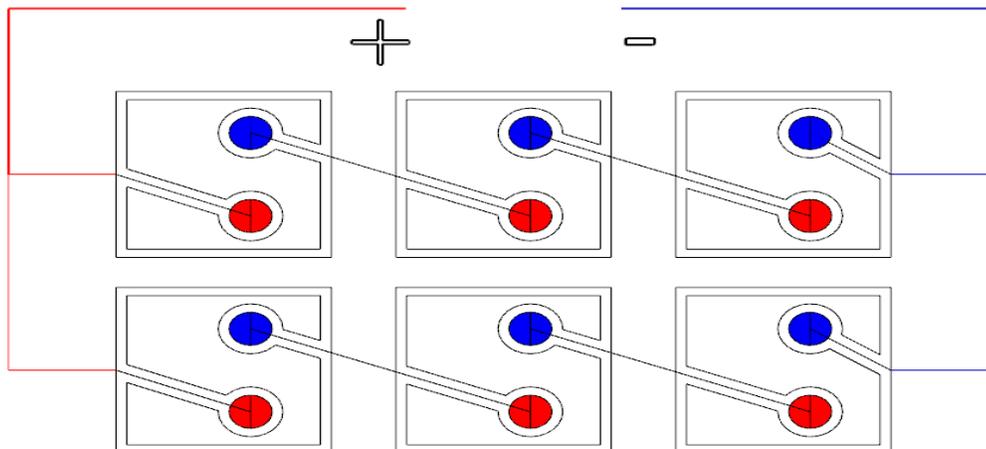
200% TRIPLE THE POWER OF TRADITIONAL BATTERIES 1/2 HALF THE WEIGHT 5x CHARGES FIVE TIMES FASTER 4x LONGER LIFE



SUITABLE FOR **NOT TO BE USED FOR A STARTER BATTERY. DEEP CYCLE APPLICATIONS ONLY.**

36V TROLLING MOTORS • 36V ELECTRIC MOTOR • COMPATIBLE WITH ONBOARD CHARGING • BOATING / MARINE DEEP CYCLE
OUTDOOR ADVENTURES • REMOTE POWER • AND MORE

BATERAI



Lampiran 7 spesifikasi *solar charger controller*



Tabel parameter Teknologi:

Tegangan sistem (baterai)	96V	110V	120V
Sistem saat ini	25A / 40A / 50A / 60A / 80A		
Mode kontrol	MPPT--- (Efisiensi pengisian daya 30% lebih tinggi dari tipe PWM)		
Jenis baterai	Mendukung semua jenis baterai		
Kehilangan tanpa beban	<10mA	<10mA	<10mA
Tegangan input energi surya	<= 220V	<= 240V	<= 260V
Perlindungan kelebihan tegangan	132.0V ± 1%	148.0V ± 1%	165.0V ± 1%
Pemulihan kelebihan tegangan	120.0V ± 1%	135.0V ± 1%	150.0V ± 1%
Tegangan muatan seimbang	116.8V ± 1%	133.0V ± 1%	146.0V ± 1%
Menambah tegangan pengisian	115.2V ± 1%	132.0V ± 1%	144.0V ± 1%
Tegangan pengisi daya apung	110.4V ± 1%	124.0V ± 1%	138.0V ± 1%
Pengisian tegangan balik	106.4V ± 1%	120.0V ± 1%	133.0V ± 1%
Tegangan perlindungan lebih dari debit	88.8V ± 1%	100.0V ± 1%	111.0V ± 1%
Lebih dari debit tegangan kembali	102.4V ± 1%	116.0V ± 1%	128.0V ± 1%
Malam identifikasi tegangan	24.0V ± 1%	27.0V ± 1%	30.0V ± 1%
Tegangan identifikasi siang hari	56.0V ± 1%	63.0V ± 1%	70.0V ± 1%
Suhu kompensasi	-4.0mv/° C/2V		
Perlindungan sirkuit pendek kelebihan beban	1.25 kali peringkat saat ini 30S; 1.5 kali peringkat saat ini 10S perlindungan arus berlebih ≥ 3 kali peringkat perlindungan sirkuit pendek saat ini		
Suhu kerja	-25 ° C to + 60 ° C		
Derajat perlindungan	IP30		
Ukuran garis besar	150mm * 135mm * 63mm		
Berat badan	1.45KG		

Lampiran 8 Luas area yang dibutuhkan PLTS

