



ASTROENERGY



1.	.....	3
1.1	.....	3
1.2	.....	3
2.	.....	3
3.	.....	3
3.1	.....	3
3.2	.....	5
4.	&	6
4.1	&	6
4.2	.....	8
4.3	.....	9
5.	.....	10
5.1	.....	10
5.2	.....	10
5.3	.....	11
5.3.1	.....	11
5.3.2	.....	12
6.	.....	16
6.1	.....	16
6.2	.....	16
6.3	.....



1.

2.

1.1

3.

1

1

IEC61215

IEC61730 UL61730

A

50V

240W

C

IEC61730 4

UL61730

CHSM54N-HC	CHSM54N(BLH)-HC	CHSM72M-HC
CHSM60N-HC	CHSM60N(BLH)-HC	CHSM72N-HC
CHSM72N(BLH)-HC	CHSM72M(BLH)-HC	CHSM78N-HC
CHSM72RN-HC	CHSM54RN(BLH)-HC	CHSM54RN-HC

1.2

3.1

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30V

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50m

50m

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50~500m

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DOP

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ASTROENERGY

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4mm²

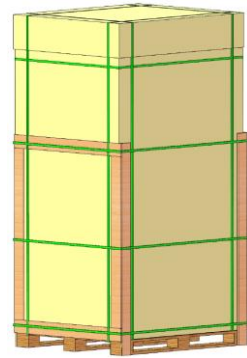
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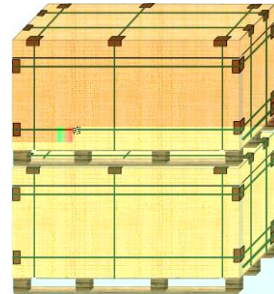
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4. &



4.1 &



U

1.

U

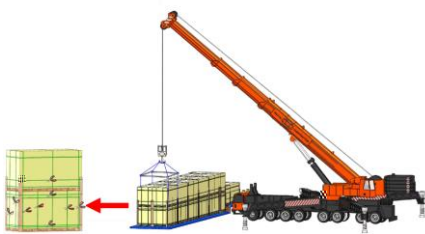
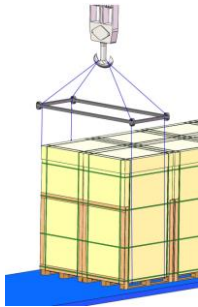
2.

6

|

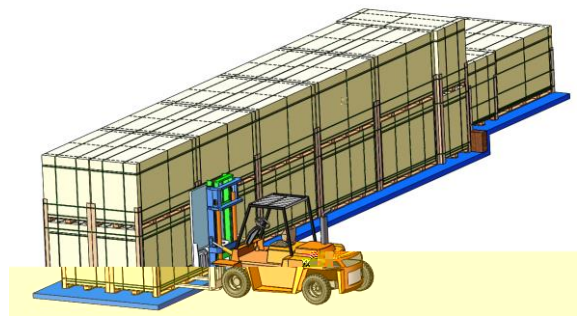


3. 2
U 2

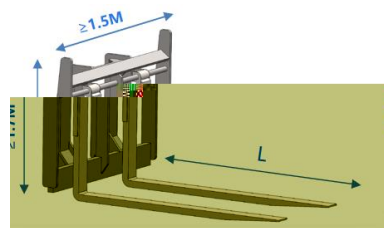


U

4.



U



1.

2.

L

3/4



EPE

3.

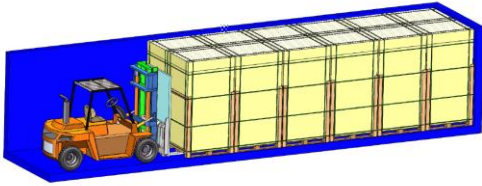
EPE

|



50mm

1



4.2



6

1.

(1.

)

2.



3.

2.

4.

1)

2)

3)

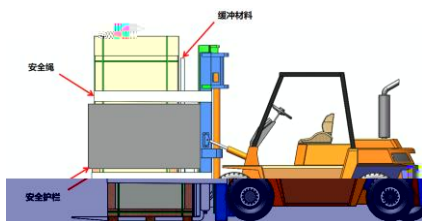
4)

5)

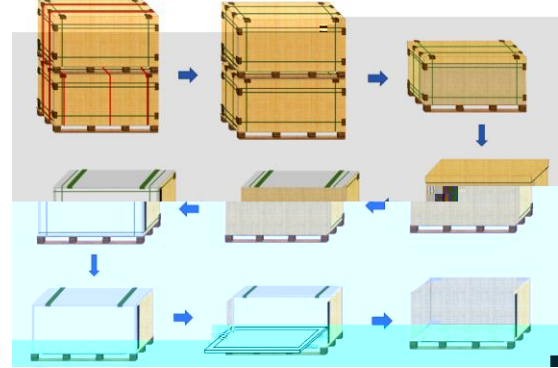
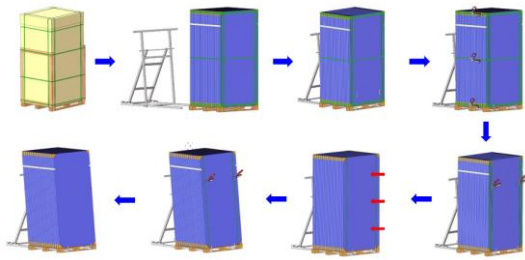
6)

7)

8)



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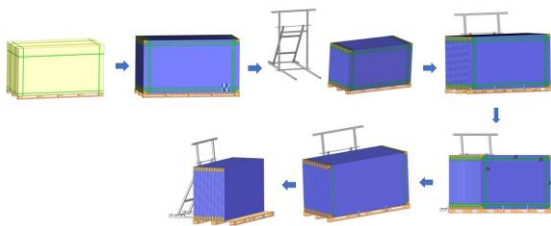


- 3.
- 1)
- 2)
- 3)
- 4)
- 5)
- 6)
- 7)
- 8)
- 9)

U



4.3

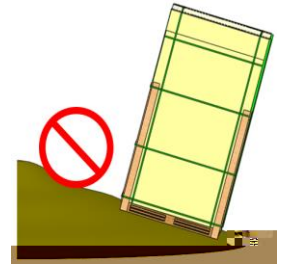
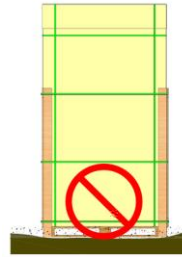


/

- 4.U
- 1)
- 2)
- 3)
- 4)



ASTROENERGY



4°

670W-L

670W-H

5.

5.1

•

-

•

-

/ 5400Pa/2400Pa

1.5

3600Pa/1600Pa

5.3

4°

•

•

ISO 9223

C3

BOM

5.2

|



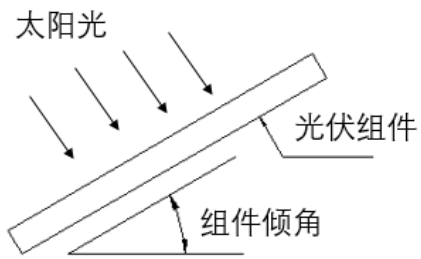
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1

10cm

.

10mm



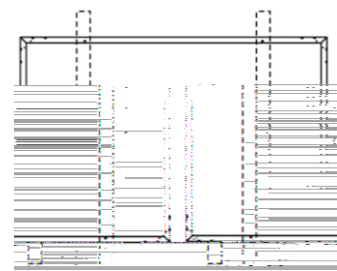
1

5.3.1

4

2 3 4 5 6 7

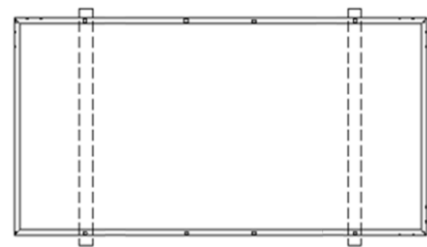
2



2 54cell

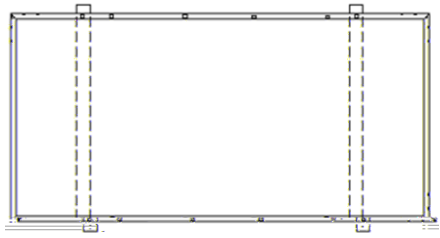
5.3

.

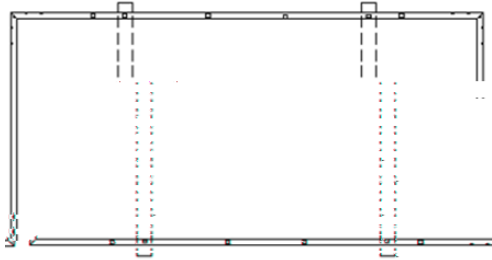


3 60cell

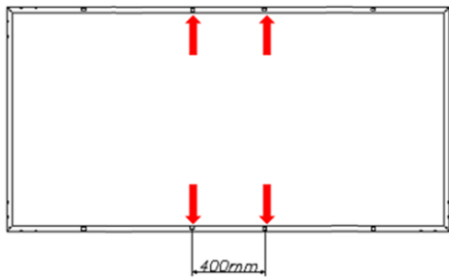
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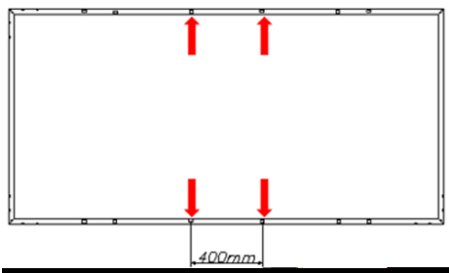
4 72cell



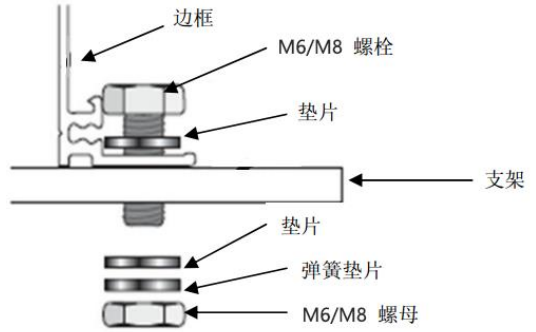
5 72cell



6 60cell 400mm



7 72cell 400mm



8

4 9x14mm

4 M8 400mm

7x10mm 4 M6

1.5mm

16~18mm 210

18~20mm

GB /T 3103.3 - 2020 A

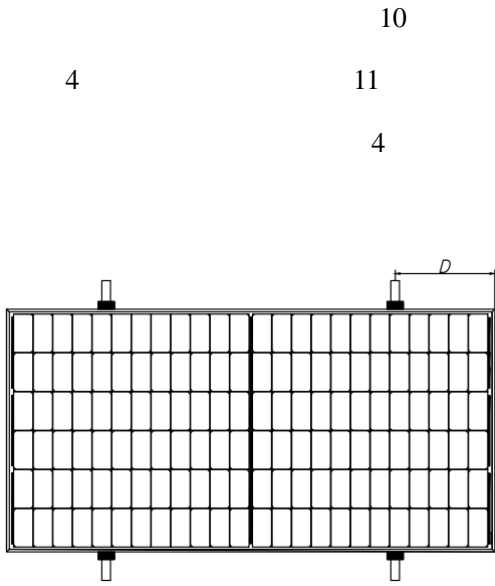
M6 9~12 M8

17~23

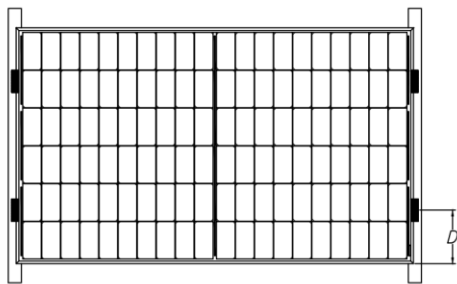
30mm

8

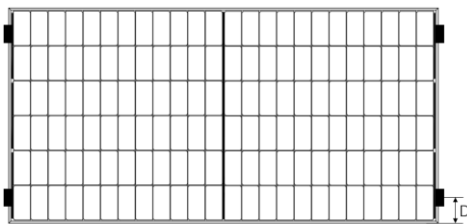
5.3.2



9



10



11

10

4

11

2 ---

4

M8

M8

4

8mm

11mm

M8

12 13

14 15

60 mm,

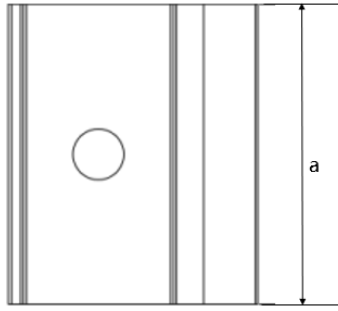
8mm

8.8

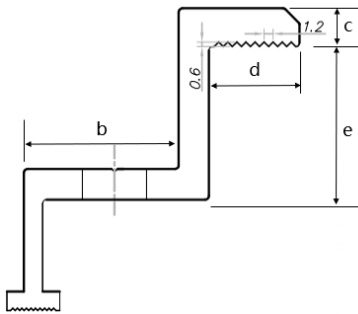
17~23



ASTROENERGY



12





	L*W*H(mm)							400mm
CHSM54N-HC CHSM54N(BLH)-HC	1722*1134*30	---	+5400Pa -2400Pa	+5400/-2400Pa D 316~416mm	+1800/-1800Pa D 150~250mm	+1800/-1800Pa D 0~250mm	---	
CHSM54RN-HC CHSM54RN(BLH)-HC	1800*1134*30	---	---	+5400/-2400Pa D 320~420mm	+1800/-1800Pa D 150~250mm	+1800/-1800Pa D 0~250mm	---	
CHSM60N-HC CHSM60N(BLH)-HC	1908*1134*30	+5400Pa -2400Pa	+5400Pa -2400Pa	+5400/-2400Pa D 320-520mm	+1600/-1600Pa D 150~250mm	---		
CHSM72M-HC CHSM72M(BLH)-HC CHSM72N-HC CHSM72N(BL)-HC CHSM72N(BLH)-HC	2278*1134*35	+5400Pa -2400Pa	---	+5400/-2400Pa D 400~500mm	---	---	+1800Pa -1800Pa	
	2278*1134*30	+5400Pa -2400Pa	---	+5400/-2400Pa D 430~530mm	---	---	+1800Pa -1800Pa	
CHSM72RN-HC	2382*1134*35	+3600Pa -2400Pa	---	---	---	---	---	

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6.

6.1

-31 ~ -35	1.23
-36 ~ -40	1.25

STC 1000W/m² AM1.5

Isc

$$C_{voc} = 1 - \frac{V_{oc} - V_{oc,25}}{25 - T_{min}}$$

Voc Pmpp

Cvoc

voc (%/°C)

T_{min} (°C)

STC

STC

1.25

3

1.25

1.56

3

$$V_{oc} * C_{voc}$$

Voc

24 ~ 20	1.02
19 ~ 15	1.04
14 ~ 10	1.06
9 ~ 5	1.08
4 ~ 0	1.10
-1 ~ -5	1.12
-6 ~ -10	1.14
-11 ~ -15	1.16
-16 ~ -20	1.18
-21 ~ -25	1.20
-26 ~ -30	1.21

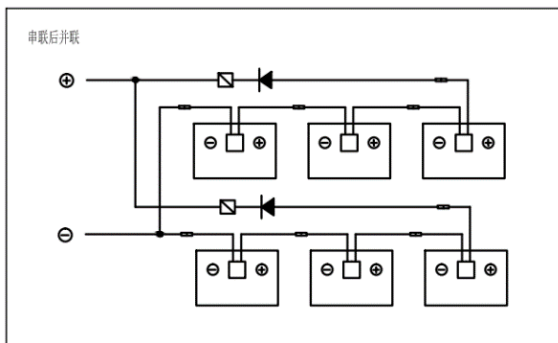
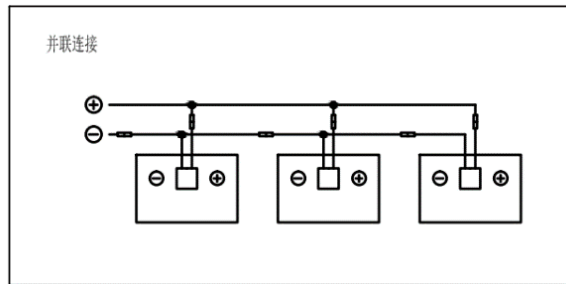
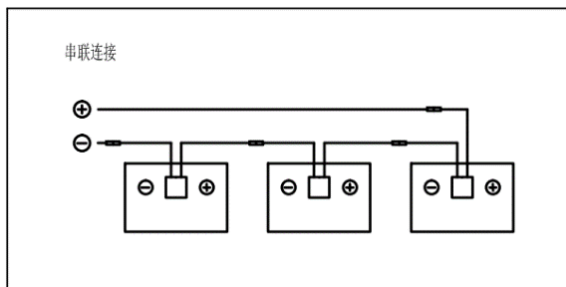
6.2



PV

PV

10V



W

⊕



6.3

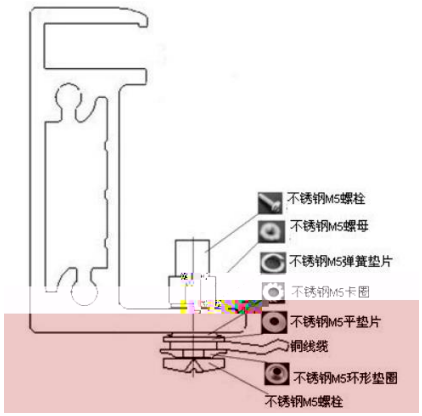
-
- M5 M5 M5
- M5 M5
- 5.5mm
- M5

-
-
-

- UL-467
- Burndy (Wiley Electronics) WEEB
- UL-467

- UL 2703
-
-

17



17

7.

7.1

