

- ویژگی‌های سیلیکونی با کیفیت، تضمین‌کننده توان خروجی بالای ماژول و مقرون به صرفه بودن آن هستند و این محصول را به انتخاب ایده‌آلی برای نیروگاه‌های بزرگ تبدیل می‌کنند.
- سازگاری با شرایط سخت محیطی از طریق موفقیت در آزمون‌های مقاومت در برابر عوامل جوی مانند شدن و گرد و غبار، مه نمکی، اسیدی نمک، و گاز آمونیاک.
- استفاده از مواد پست‌مهندسی منتخب و برنامه‌های فرآیندی دقیق برای اطمینان از مقاومت در برابر پدیده PID (تخریب بالقوه الکتریکی).
- طراحی اتصالات سری و موازی که مقاومت الکتریکی اجزا را کاهش می‌دهد، مشکلات عملکرد الکتریکی داخلی را به حداقل می‌رساند و ظرفیت تولید توان سیستم را بهبود می‌بخشد.
- کاهش میزان اکسیداسیون و کریپن منجر به کاهش پدیده LID (کاهش اولیه توان ناشی از نور) می‌شود.
- شرکت ما یک قرارداد بیمه انکابی با موسسه Ariel Re سدیکایی لویده ۱۹۱۰ منعقد کرده است.

## Monocrystalline Module PV Modules

### N-Type

**DA-NM12R/132GN**  
600W-630W

### P-Type

**DA-M10/144H**  
530W-550W

### TOPCON

**DA-M10/144GN**  
565W-585W

**DA-M12/132GN**  
675W-695W

## 600W-630W

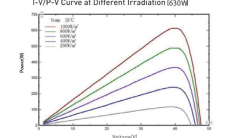
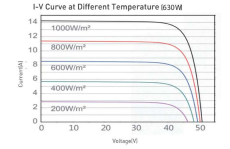
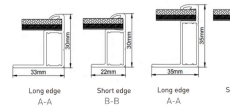
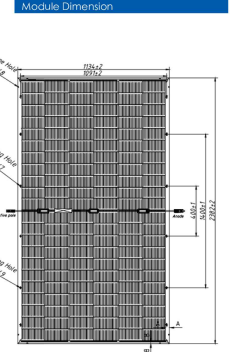
Type		DA-NM12R/132GN(Bifacial Dual Glass)						
<b>Electrical Specification(STC)*</b>								
Maximum Power	P <sub>max</sub> (W)	600	605	610	615	620	625	630
Maximum Power Voltage	V <sub>mp</sub> (V)	40.30	40.50	40.80	41.10	41.40	41.70	42.00
Maximum Power Current	I <sub>mp</sub> (A)	14.91	14.94	14.96	14.98	14.99	15.00	15.01
Open Circuit Voltage	V <sub>oc</sub> (V)	48.40	48.70	49.00	49.30	49.60	49.90	50.20
Short Circuit Current	I <sub>sc</sub> (A)	15.80	15.83	15.86	15.89	15.91	15.92	15.94
Module Efficiency	(%)	22.30	22.50	22.70	22.90	23.10	23.30	23.60
Power Output Tolerance	W	0+3%						
* Irradiance 1000W/m <sup>2</sup> , Module Temperature 25 °C, Air Mass 1.5								

Type		DA-NM12R/132GN(Bifacial Dual Glass)						
<b>Electrical Specification(NCOTM)</b>								
Maximum Power	P <sub>max</sub> (W)	455	459	463	467	471	475	479
Maximum Power Voltage	V <sub>mp</sub> (V)	37.20	37.50	37.80	38.10	38.40	38.70	39.00
Maximum Power Current	I <sub>mp</sub> (A)	12.23	12.24	12.26	12.28	12.29	12.30	12.31
Open Circuit Voltage	V <sub>oc</sub> (V)	46.00	46.30	46.60	46.90	47.20	47.50	47.80
Short Circuit Current	I <sub>sc</sub> (A)	12.60	12.63	12.66	12.69	12.72	12.75	12.78
* Irradiance 800W/m <sup>2</sup> , Ambient Temperature 20 °C, Wind Speed 1m/s								

Type		DA-NM12R/132GN(Bifacial Dual Glass)	
<b>Mechanical Data</b>			
Number of Cells	132 pieces [6x22]		
Dimensions of Module L*W*H (mm)	2382 x 1134 x 30/35mm		
Weight (kg)	Approx 33.3/33.6 kg		
Front Side Glass	2.0mm, Anti-reflection coating glass		
Back Side Glass	2.0mm, High transparency solar glass		
Frame	Anodized aluminium		
J-B ox	Protection level IP68		
Cable	4.0mm <sup>2</sup> , 300m		
Number of diodes	3		
Wind/Snow Load	2400 Pa/5400 pa		
Connector	MC4 compatible or MC compatible		
* For more details please check the installation manual			

Type		DA-NM12R/132GN(Bifacial Dual Glass)	
<b>Temperature Ratings</b>			
Nominal Operating Cell Temperature (NOCT)	44±2°C		
Temperature Coefficient of I <sub>c</sub>	+0.046%/°C		
Temperature Coefficient of Voc	-0.250%/°C		
Temperature Coefficient of P <sub>max</sub>	-0.300%/°C		
<b>Maximum Ratings</b>			
Operational Temperature	-40~+85°C		
Maximum System Voltage	1500V DC [L-H]		
Max Series Fuse Rating	35A		

Type		DA-NM12R/132GN(Bifacial Dual Glass)	
<b>Packaging Configuration</b>			
Module per box	36/31 pieces		
Module per 17.5 flatcar	828/806 pieces		
Module per 40 container	720/620 pieces		
<b>Optional</b>			
Connector	Original MC		
Cable length h	1200m		
Frame	Black		
Backsheet	Black		



## 565-595W

Type		DA-M10/144GN(Bifacial Dual Glass)						
<b>Electrical Specification(STC)*</b>								
Maximum Power	P <sub>max</sub> (W)	565	570	575	580	585	590	595
Maximum Power Voltage	V <sub>mp</sub> (V)	42.14	42.29	42.44	42.59	42.75	42.90	43.05
Maximum Power Current	I <sub>mp</sub> (A)	13.41	13.48	13.55	13.62	13.69	13.76	13.82
Open Circuit Voltage	V <sub>oc</sub> (V)	50.87	51.07	51.27	51.47	51.67	51.87	52.07
Short Circuit Current	I <sub>sc</sub> (A)	14.19	14.25	14.31	14.37	14.43	14.49	14.55
Module Efficiency	(%)	21.90	22.10	22.30	22.50	22.70	22.90	23.00
Power Output Tolerance	W	0+3%						
* Irradiance 1000W/m <sup>2</sup> , Module Temperature 25 °C, Air Mass 1.5								

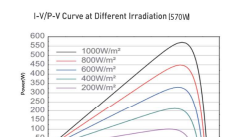
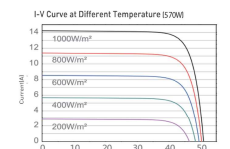
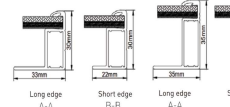
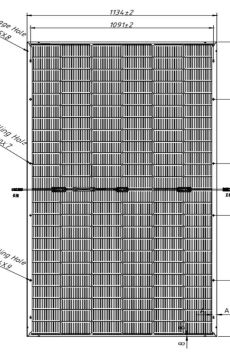
Type		DA-M10/144GN(Bifacial Dual Glass)						
<b>Electrical Specification(NCOTM)</b>								
Maximum Power	P <sub>max</sub> (W)	425	429	432	436	440	444	448
Maximum Power Voltage	V <sub>mp</sub> (V)	39.38	39.51	39.60	39.69	39.81	39.93	40.05
Maximum Power Current	I <sub>mp</sub> (A)	10.79	10.85	10.92	10.99	11.05	11.12	11.19
Open Circuit Voltage	V <sub>oc</sub> (V)	48.06	48.20	48.33	48.46	48.60	48.74	48.88
Short Circuit Current	I <sub>sc</sub> (A)	11.49	11.55	11.62	11.68	11.75	11.82	11.89
* Irradiance 800W/m <sup>2</sup> , Ambient Temperature 20 °C, Wind Speed 1m/s								

Type		DA-M10/144GN(Bifacial Dual Glass)	
<b>Mechanical Data</b>			
Number of Cells	144 pieces [6x24]		
Dimensions of Module L*W*H (mm)	2278 x 1134 x 30/35mm		
Weight (kg)	Approx 32.0/32.3 kg		
Front Side Glass	2.0mm, Anti-reflection coating glass		
Back Side Glass	2.0mm, High transparency solar glass		
Frame	Anodized aluminium		
J-B ox	Protection level IP68		
Cable	4.0mm <sup>2</sup> , 1200m		
Number of diodes	3		
Wind/Snow Load	2400 Pa/5400 pa		
Connector	MC4 compatible or MC compatible		
* For more details please check the installation manual			

Type		DA-M10/144GN(Bifacial Dual Glass)	
<b>Temperature Ratings</b>			
Nominal Operating Cell Temperature (NOCT)	44±2°C		
Temperature Coefficient of I <sub>c</sub>	+0.046%/°C		
Temperature Coefficient of Voc	-0.250%/°C		
Temperature Coefficient of P <sub>max</sub>	-0.300%/°C		
<b>Maximum Ratings</b>			
Operational Temperature	-40~+85°C		
Maximum System Voltage	1500V DC [L-H]		
Max Series Fuse Rating	25A		

Type		DA-M10/144GN(Bifacial Dual Glass)	
<b>Packaging Configuration</b>			
Module per box	36/31 pieces		
Module per 17.5 flatcar	864/868 pieces		
Module per 40 container	720/620 pieces		
<b>Optional</b>			
Connector	Original MC		
Cable length h	1200m		
Frame	Black		
Backsheet	Black		

## Module Dimension



## 530-550W

Type		DA-M10/144H				
<b>Electrical Specification(STC)*</b>						
Maximum Power	P <sub>max</sub> (W)	530	535	540	545	550
Maximum Power Voltage	V <sub>mp</sub> (V)	40.56	40.63	40.70	40.80	40.90
Maximum Power Current	I <sub>mp</sub> (A)	13.07	13.17	13.27	13.36	13.45
Open Circuit Voltage	V <sub>oc</sub> (V)	49.26	49.34	49.42	49.52	49.62
Short Circuit Current	I <sub>sc</sub> (A)	13.71	13.79	13.85	13.94	14.03
Module Efficiency	(%)	20.6	20.8	21.0	21.2	21.4
Power Output Tolerance	W	0+5				
* Irradiance 1000W/m <sup>2</sup> , Module Temperature 25°C, Air Mass 1.5						

Type		DA-M10/144H				
<b>Electrical Specification(NCOTM)</b>						
Maximum Power	P <sub>max</sub> (W)	394	398	402	406	410
Maximum Power Voltage	V <sub>mp</sub> (V)	37.92	38.05	38.19	38.32	38.46
Maximum Power Current	I <sub>mp</sub> (A)	10.40	10.46	10.52	10.58	10.64
Open Circuit Voltage	V <sub>oc</sub> (V)	46.50	46.63	46.75	46.88	47.00
Short Circuit Current	I <sub>sc</sub> (A)	11.06	11.12	11.19	11.25	11.32
* Irradiance 800W/m <sup>2</sup> , Ambient Temperature 20°C, Wind Speed 1m/s						

Type		DA-M10/144H	
<b>Mechanical Data</b>			
Number of Cells	144 Cells [6x24]		
Dimensions of Module L*W*H (mm)	2278x1134x30mm [89.72x44.64x1.18 inches]		
Weight (kg)	29.4 kg		
Glass	High transparency solar glass 3.2mm (0.13 inches)		
Backsheet	White		
Frame	Silver, anodized aluminium alloy		
J-Box	IP68 Rated		
Cable	4.0mm <sup>2</sup> (0.004 inches) <sup>2</sup> , 300mm (11.8 inches)		
Number of diodes	3		
Wind/Snow Load	2400Pa/ 5400Pa*		
Connector	MC Compatible		

Type		DA-M10/144H	
<b>Temperature Ratings</b>			
Nominal Operating Cell Temperature (NOCT)	44±2°C		
Temperature Coefficient of I <sub>c</sub>	+0.046%/°C		
Temperature Coefficient of Voc	-0.270%/°C		
Temperature Coefficient of P <sub>max</sub>	-0.350%/°C		

Type		DA-M10/144H	
<b>Maximum Ratings</b>			
Operational Temperature	-40~+85°C		
Maximum System Voltage	1500V DC [L-H]		
Max Series Fuse Rating	20A		

Type		DA-M10/144H	
<b>Packaging Configuration</b>			
Module per box	31 pieces		
Module per 40 container	420 pieces		

Type		DA-M10/144H	
<b>Optional</b>			
Connector	MC Original		

## Module Dimension

