	Widely using of the most popular and mature type of modules for on-grid system.		
~	Leading manufacturing technology in PV industry, strictly controlling the quality of raw materials and the process of producing.		
	100% EL inspection ensures modules are defects free.		
(999)	Cells binned by current to improve module performance.		
<i>\</i>	100% EL inspection ensures modules are defects free.		
	Anti reflective glass. Not only to increase the light absorption, but also to make the module has the function of self-cleaning in water environment, effectively reducing the power loss caused by dust.		
5400 Pa	Excellent mechanical load resistance: Certified to withstand high wind loads (2400pa) and snow loads(5400pa)		
1	High salt and ammonia resistance.		
0~+5 W	Positive power tolerance:0-+5w.		
(
1) years 25 products power output		

warranty

CNBM 中国建材国际 CNBM International

Solar Panel Energy (Pty) Ltd

VAT: 4600287983 204 Louis Trichardt Blvd, Vanderbijlpark inquiry@sp-energy.co.za

M-450

MONOCRYSTALLINE SILICON MODULE

RAW MATERIALS AND MECHANICAL PARAMETERS

	M-450
Type of Cells(mm)	Mono Half Cell 158.75 X 79.375
NO. of Cells and Connections	6 x 24=144
Dimensions(mm)(L*W*H)	2094 x 1038 x 35mm
Weight(kg)	23.5Kg
Glass	3.2mmTempered Glass
Encapsulation	EVA
Backsheet	Multilayer Composite
Frame	Silver Anodized Aluminium Alloy
Junction Box	lp68
Cable	4mm ² ,1400mm
Connector	Mc4 Compatible
Package Configuration	26pcs/pallet

PERFORMANCE PARAMETERS

	M-450	
Maximum System Voltage	1500V	
Operating Temperature	-45~+80℃	
Maximum Series Fuse	20A	
Maximum Static Load, Front Side (e.x. Snow, Wind)	5400Pa	
Maximum Static Load, Back Side(e.x. Wind)	2400Pa	
Application Grade	Class A	

ELECTRICAL PARAMETERS (STANDARD TEST CONDITION)

	M-450
Power Tolerance	6M-400
Rated Maximum Power(Mp)	450W
Module Efficiency	20.7%
Open Circuit Voltage(Voc)	49.30V
Maximum Power Voltage(Vmp)	41.5V
Short Circuit Current(Isc)	11.60A
Maximum Power Current(Imp)	10.85A
Temperature Coefficient of Isc	+0.06%
Temperature Coefficient of Voc	-0.34%
Temperature Coefficient of Pmp	-0.40%

Address: Floor 17-18th, No.4 Building Zhuyu International Commercial. Center No.9 Shouti South Road, Haidian District, Beijing 100048, China Website. www.cnbmsolar.com

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Standard Test Condition

Irradiance:1000W/M2,Cell Temperature:25°C,Spectrum AM:1.5

The Electrical Parameters of the module are the average theory figure under the standard test condition, each one exists difference. Can not be treated as the basis of module delivery.