

SPECIFICATIONS

CELL	Multicrystalline silicon solar cell	156mmx52mm
No. of cells and connections	36(4x9)	
Dimension of module	665x537x35(mm)	26.2x21.1x1.38 (in)
Weight	5kg	11.01b

Characteristics

Model	SPM040P	SPM045P
Power at STC(P _m)	40W	45W
Maximum power voltage(V _{pm})	17.3V	18.3V
Maximum power current(I _{pm})	2.35A	2.52A
Open circuit voltage(V _{oc})	21.8V	22.2V
Short circuit current(I _{sc})	2.57A	2.69A
Tolerance	±5%	±5%
Module efficiency	11.6%	13.10%

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

Limits

Operating temperature	-40 to +85°C
Maximum system voltage	1000V DC
Series fuse rating	12A

Components & Mechanical Data

Front Glass	3.2mm tempered
Junction Box	IP-65 rated
Frame	Anodized aluminum alloy type 6063-T5
Encapsulation Material	EVA(0.5±0.05mm thickness)
Back Foil	White TPT(0.32±0.03mm thickness)
Temperature Range	-40°C to +90°C
Max Load	5400Pa

Temperature coefficient

Nominal Operation Cell Temperature	48°C±2°C
Current temperature coefficient	0.06±0.01 %/K
Voltage temperature coefficient	- (78±10) mv/k
Power temperature coefficient	- (0.5±0.05) %/k

For product and
purchasing

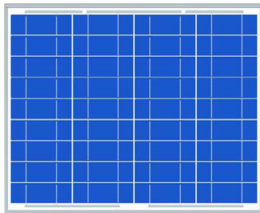
inquiries contact: CLEAN ENERGY SOLUTIONS

IEC: C1-ASN07001

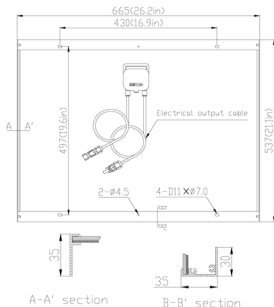
TUV: 0000022551

UL: E330673

ecoDIRECT



Back of the module



IV CURVES

