

## SP60-M, SP65-M, SP70-M

### SOLLATEK SP60-M, SP65-M, SP70-M 12V PHOTOVOLTAIC MODULE

#### Models :

SP60-M, SP65-M, SP70-M

#### General:

Solar cells directly convert sunlight into electricity by means of the photovoltaic effect. This occurs when photons are absorbed by a solar cell which generates a voltage across its terminals. Cells are connected in series within a solar module to provide sufficient voltage to operate a system. Modules can be connected in series and parallel to increase the system power. This solid state process provides a clean, silent, non-polluting and reliable source of electrical energy.

Sollatek's high efficiency SP60-M, SP65-M, SP70-M solar modules are constructed for 36 monocrystalline cells. The cells are individually tested and matched for optimum performance before being built into the protective module structure. A Tedlar® base is used and ethylene vinyl acetate encapsulant. High transmission tempered glass protects the cells from the front and a high strength polymer sheet at the rear. A reinforced aluminium frame completes the laminate structure which is fully sealed against moisture and protected from environmental and mechanical damage.

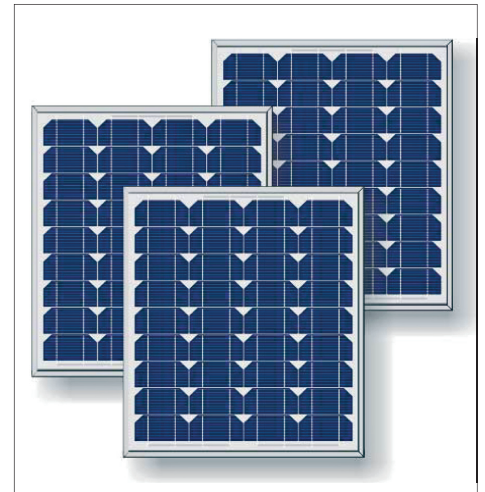
#### Features:

- High efficiency modules
- 36 off 6 inch (156 x 156 mm) cells
- Reinforced anodised aluminium frame
- Protected by 2 schottky by-pass diodes
- Universal junction box
- Pre-drilled frame for easy mounting
- Product warranty : 5 years\*
- Efficiency warranty : 25 years\*
- Power tolerance : +/- 3%
- Quality assurance : ESTI (61215), TÜV (Safety Class II), PVGap, ISO 9001.



#### Applications:

- Telecommunications
- Rural electrification
- Grid connected large scale system
- Power plants
- Buildings integration
- Water pumping



SP60-M



\*According to general warranty conditions

# SP60-M, SP65-M, SP70-M

## Specifications

	SP60-M	SP65-M	SP70-M
Cell	Monocrystalline silicon solar cells 156 x 78mm		
No. of cells and connections	36 (4x9)		
Dimensions of module	771 x 665 x 30 mm		
Weight	6.2 kg		

## Characteristics

Open circuit voltage (Voc)	21.6V	21.8V	22.1V
Optimum operating voltage (Vmp) - minimum	17.2V	17.2V	17.6V
Short circuit current (Isc)	3.85A	3.93A	4.05A
Optimum operating current (Imp) - minimum	3.49A	3.78A	3.98A
Power at STC (Pm) - minimum	60Wp	65Wp	70Wp

## Limits

Operating temperature	-40 to +85°C
Maximum system voltage	7150 V DC

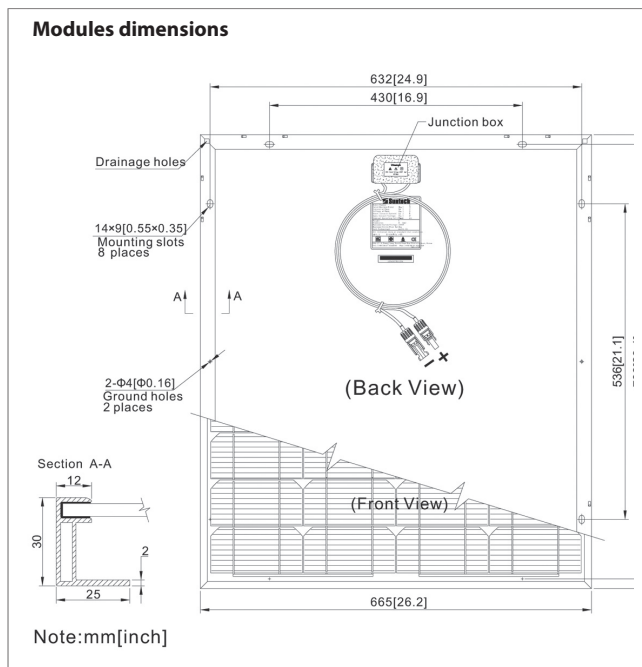
## Temperature and coefficients

NOCT	48°C ± 2°C
Current temperature coefficient	0.06 ± 0.01%/K
Voltage temperature coefficient	-(155 ± 10) mV/K
Power temperature coefficient	-(0.5 ± 0.05) %/K

## Output

Type of output terminal	Junction box
Cable	LAPP (4.0mm <sup>2</sup> )
Lengths	750mm (-) and 750mm (+)
Connection	Plug type IV

STC: Irradiance 1000W/m<sup>2</sup>. Module temperature 25°C, AM=1.5



## Characteristics

Module IV Graph 60W

