



OJSC "RPE "KVANT"

PV Modules KCM

PV modules KCM allow to convert the sunlight into an electric current. The obtained energy is operable as follows:

- can be used directly by various consumers of DC;
- can be stored in the storage batteries for subsequent application and covering of peak loads;
- can be converted into AC with voltage 220 V powering different consumers of AC.

PV modules can be used both in standalone systems as well as in network built-in systems.

Modules KCM application sphere is as follows:

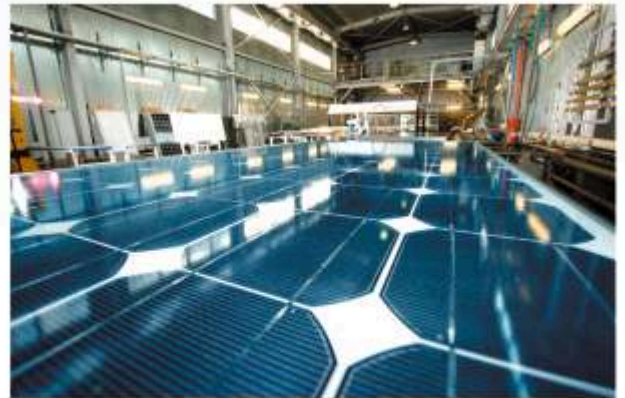
- the power stations of household and industrial type;
- the telecommunications;
- the pumping stations;
- the navigation systems;
- the signaling system;

Manufacturing of PV modules of KCM type is based on use of the novel technologies and innovational solutions in lay-out field. It is accomplished on modern automated production line providing maximum level of protection of solar cells in complicated climatic and operation conditions.

Each module consists of 72 mono-crystalline or multi-crystalline solar cells 125 x 125mm laminated between two sheets of film and protected from front side by hardened glass of high transparency and from rear side by Tedlar sheet.

Advantages of PV Modules KCM type:

- stability to mechanical and climatic influence;
- high moisture resistance;
- SC efficiency more than 16%;
- rapid installation and maximum protection during operation life;
- operating temperature range from -40 to + 90°C.



General Characteristics of PV Module KCM type

under standard conditions:

Illumination 1000 W/m^2 , module temperature 25°C , AM 1.5

Solar Cell Type	KCM-175-1 mono-crystalline silicon KCM-175-2 multi-crystalline silicon
SC quantity	72 (6 x 12)
Dimensions, mm	1585 x 805 x 34
Weight, kg.	16
Type of electrical outputs	Wires with terminals
Power, W	$175 \pm 5\%$
Voltage under maximum power, V	$35,0 \pm 5\%$
Open Circuit Voltage, V	$43,0 \pm 5\%$
Short Circuit Current, A	$5,4 \pm 5\%$
Life time, years	15 (90%) 25 (80%)



**Manufacture and supplier:
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