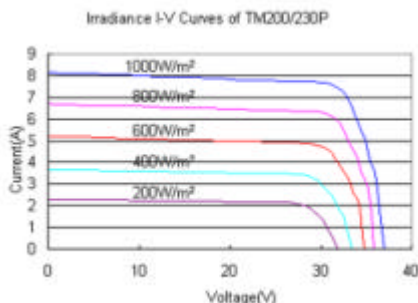
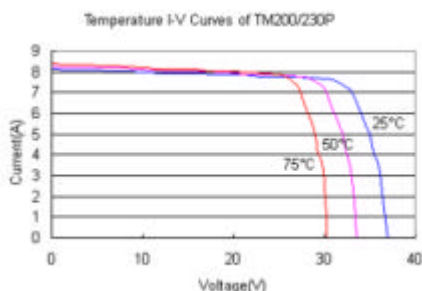


## Specifications of TM210/230P Photovoltaic Modules

### Characteristic curve at various irradiance levels



### Characteristic curve at various cell temperatures



### Typical Electrical Characteristics

### POLY CRISTALLINE SERIES

Model Number	TM210P	TM220P	TM230P
Rated Maximum Power (Pmax)	210W	220W	230W
Power Tolerance	+3% -0%	+3% -0%	+3% -0%
Maximum Power Voltage (Vmp)	29,2V	29,8V	30,3V
Maximum Power Current (Imp)	7,20A	7,40A	7,60A
Open Circuit Voltage (Voc)	36,4V	36,8V	37,2V
Short Circuit Current (Isc)	7,80A	8,00A	8,20A
Maximum System Voltage (VDC)	1000V		
Module Efficiency	12,8%	13,4%	14,1%
Solar Cell Type	60 cells (156 x 156 mm) in a 6 x 10 matrix connected in series		
Standard Test Condition	STC: AM=1.5, 1000W/m <sup>2</sup> , Cells Temperature 25°C		
Operating Temperature	-40°C ÷ +85°C		
Product Certifications	IEC 61215, IEC 61730 & CE		

### Mechanical Characteristics

Dimensions	1655 x 990 x 40 mm
Weight	19.6 kgs
Frame	Clear anodized aluminum alloy; Color: Silver

NOTE: modifications to technical data are possible without prior notice.

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