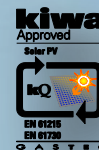


DATA SHEET

RZMP PV MODULES



RZMP-220-T PV MODULES

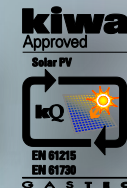
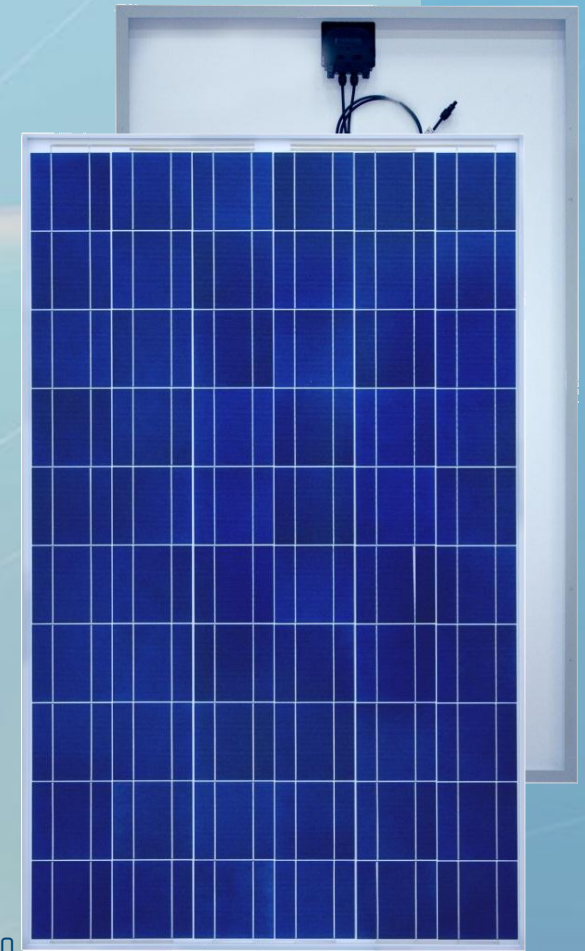
Models RZMP-200-T, RZMP-205-T, RZMP-210-T, RZMP-215-T,
RZMP-220-T, RZMP-225-T, RZMP-230-T, RZMP-235-T, RZMP-240-T

APPLICATION

- Grid-connected systems
- Stand-alone systems with MPPT controllers

FEATURES

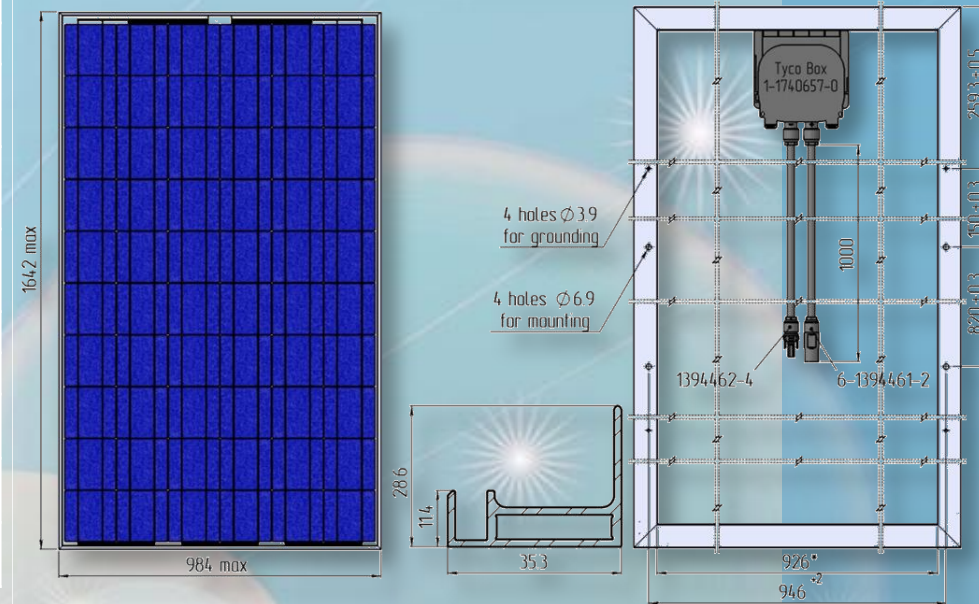
- Using of tempered glass makes the module more durable. The module is protected from hail, wind and ice.
- Low iron content provides high transparency and increases module efficiency.
- Textured glass provides high power output by more proper gathering of solar insulation.
- High sensitive surface of the cells increases power output even in weather conditions and winter time.
- Using of the back-sheet reduces vapor permeability and protects a module from weather conditions. Due to proper heat conduction of the back-sheet, the module is cooled and power output increases.
- Frame coating protects from rust.
- The Box is supplied with cables and easy-to-use connectors.
- Warranty -25 years
- Certificates: IEC 61215:2005/EN 61215:2005 IEC 61730-2:2004/EN 61730-2:2007 ГОСТ 12.2.007.0-75
- Quality Management System: ISO 9001:2008



MECHANICAL SPECIFICATIONS

Total area, m ²	161
Weight, kg	215
Front glass	Extra clear patterned tempered glass 4 mm, Albarino S, <u>Saint Gobain Solar Glass</u>
Cells	60 pc. Multicrystalline Si 6.2" (156mm x 156mm), <u>Eton</u> or <u>Tainergy</u>
Cell encapsulation	EVA VistaSolar 496.10, <u>Solutia Gmbx</u> or Photocap 15295P/UF, <u>Specialized Technology Resources, Inc.</u>
Back	Icosolar 3554 White 0.35 mm, <u>Isovoltaic AG</u>
Frame	Anodized aluminum alloy colored profile RAL 7035
Junction box	<u>Tyco 1-1740657-0</u> (with 1000mm length 4mm ² cables)
Permissible load, Pa	2400
Operating temperature range, °C	-40...85

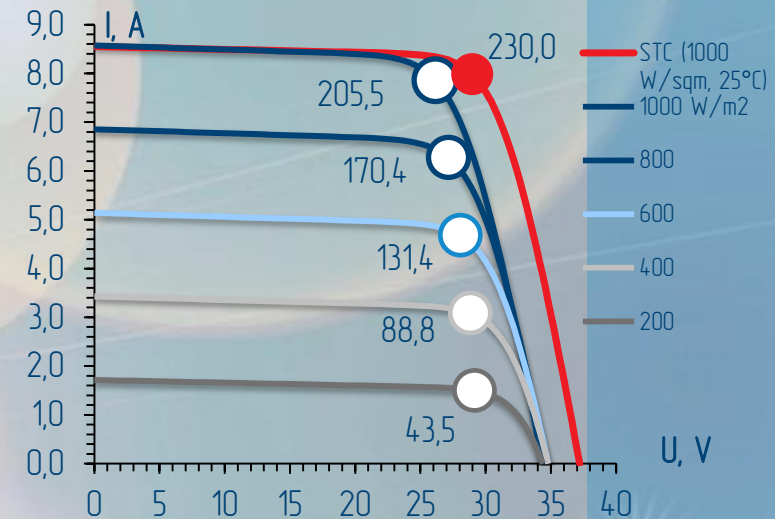
DIMENSIONS



ELECTRICAL SPECIFICATIONS

Model	200	205	210	215	220	225	230	235	240
Peak Power, W (±3%)	200	205	210	215	220	225	230	235	240
Rated Voltage, V	27,7	27,9	28,1	28,25	28,4	28,6	28,8	28,9	29,1
Rated Current, A	7,25	7,35	7,50	7,60	7,75	7,85	8,00	8,15	8,25
Open circuit voltage, V	35,7	35,9	36,2	36,5	36,7	37,0	37,3	37,5	37,8
Short circuit Current, A	7,90	8,00	8,10	8,20	8,30	8,40	8,50	8,65	8,75
Cell \ Module Efficiency, %	14,3/12,4	14,6/12,7	15,0/13,0	15,4/13,4	15,7/13,7	16,1/14,0	16,4/14,3	16,8/14,6	17,1/14,9
System Voltage, V	1 000								
Temperature coefficients, %/°C			$\alpha (I_{sc}) = 0,20$	$\beta (U_{oc}) = - 0,27$	$\gamma (P_{mpp}) = - 0,40$				
NOCT, °C	46,8								

ELECTRICAL CURVES*



* Model RZMP-230-T.
Standard Test Condition (STC):
cells temperature of 25°C, 1000W/m² irradiance, 1.5 air mass spectrum
Other curves- real cells temperature at respective irradiance (air temperature 20°C)

RZMP-130-T PV MODULE

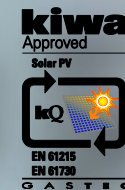
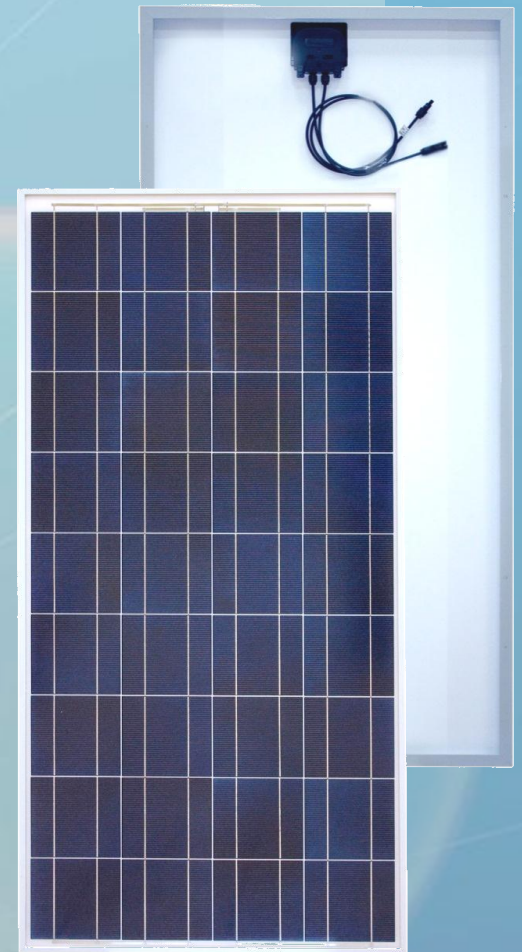
Models RZMP-105-T, RZMP-110-T, RZMP-115-T, RZMP-120-T,
RZMP-125-T, RZMP-130-T, RZMP-135-T, RZMP-140-T, RZMP-145-T

APPLICATION

Stand-alone systems

FEATURES

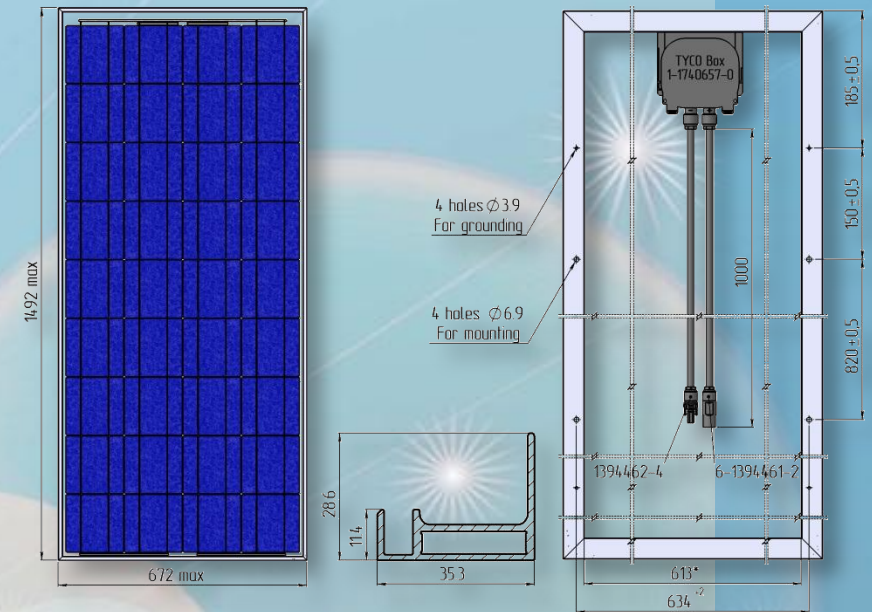
- Using of tempered glass makes the module more durable. The module is protected from hail, wind and ice.
- Low iron content provides high transparency and increases module efficiency.
- Textured glass provides high power output by more proper gathering of solar insulation.
- High sensitive surface of the cells increases power output even in weather conditions and winter time.
- Using of the back-sheet reduces vapor permeability and protects a module from weather conditions. Due to proper heat conduction of the back-sheet, the module is cooled and power output increases.
- Frame coating protects from rust.
- The Box is supplied with cables and easy-to-use connectors.
- Designed according to the following standards IEC 61215:2005/EN 61215:2005 IEC 61730-2:2004/EN 61730-2:2007 OCT 12.2.007.0-75
- Quality Management System ISO 9001:2008



MECHANICAL SPECIFICATIONS

Total Area, m ²	1.00
Weight, kg	14.6
Front Glass	Extra clear patterned tempered glass 4 mm, Albarino S, <u>Saint Gobain Solar Glass</u>
Cells	36 pc. Multicrystalline Si 6.2" (156mm x 156mm), <u>Eton</u> or <u>Tainergy</u>
Cell Encapsulation	EVA VistaSolar 496.10, <u>Solutia Gmbx</u> or Photocap 15295P/UF, <u>Specialized Technology Resources, Inc.</u>
Back	Icosolar 3469 White 0.32 mm, <u>Isovoltaic AG</u>
Frame	Anodized aluminum alloy colored profile RAL 7035
Junction Box	<u>Tyco 1-1740657-0</u> (with 1000mm length 4mm ² cables)
Permissible load, Pa	2400
Operating temperature range, °C	-40..85

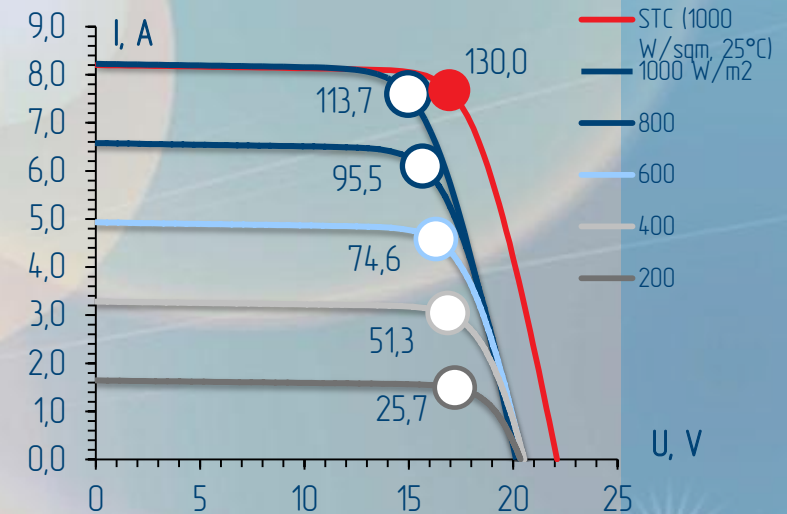
DIMENSIONS



ELECTRICAL SPECIFICATIONS

Model	105	110	115	120	125	130	135	140	145
Peak Power, W (±3%)	105	110	115	120	125	130	135	140	145
Rated Voltage, V	15,9	16,1	16,3	16,5	16,7	16,9	17,1	17,4	17,5
Rated Current, A	6,65	6,85	7,10	7,30	7,50	7,70	7,90	8,10	8,25
Open circuit voltage, V	20,6	20,9	21,1	21,3	21,6	21,9	22,2	22,4	22,6
Short circuit Current, A	7,30	7,50	7,65	7,85	8,05	8,20	8,40	8,60	8,75
Cell \ Module Efficiency, %	12,5/10,5	13,2/11,0	13,7/11,5	14,3/12,0	14,9/12,5	15,5/13,0	16,1/13,5	16,7/14,0	17,2/14,5
System Voltage, V	1 000								
Temperature coefficients, %/°C	$\alpha (I_{sc}) = 0,20$			$\beta (U_{oc}) = - 0,27$			$\gamma (P_{mpp}) = - 0,40$		
NOCT, °C	46.8								

ELECTRICAL CURVES*



* Model: RZMP-130-T.
Standard Test Condition (STC):
cells temperature of 25°C, 1000W/m² irradiance, 1.5 air mass spectrum
Other curves- real cells temperature at respective irradiance (air temperature 20 °C)