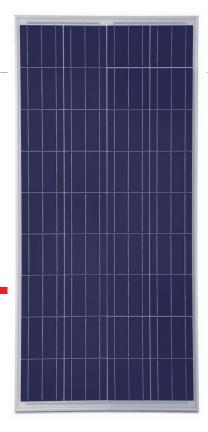
TSM-PC20

THE OFF GRID MODULE



OFF GRID

MAX POWER OUTPUT 140W

PRODUCT WARRANTY **5 YEARS**

LIMITED POWER OUTPUT WARRANTY

25 YEARS

Founded in 1997, Trina Solar is a vertically integrated PV manufacturer, producing everything from ingots to modules, using both mono and multicrystalline technologies. By the end of 2011, the company will have a nameplate module capacity of 1.9GW. Trina Solar's wide range of products are used in residential, commercial, industrial and public utility applications throughout the world.

Only by matching an efficient coststructure with proven performance will we, as an industry, achieve off-grid parity. And at Trina Solar, we have both.

Trina Solar Limited www.trinasolar.com





TUV Rheinland certificate



Guaranteed power output -3~+3%



Module can bear snow loads up to **5400Pa** and wind loads up to **2400Pa**



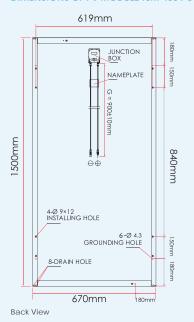
High performance under low light conditions Cloudy days, mornings and evenings

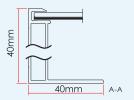


Manufactured according to International Quality and Environment Management System ISO9001, ISO14001

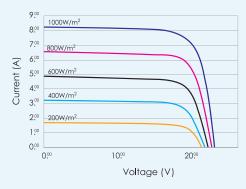
TSM-PC20 THE OFF GRID MODULE

DIMENSIONS OF PV MODULE TSM-135 PC 20





I-V CURVES OF PV MODULE TSM-135 PC 20



Avg. efficiency reduction of 4.5% at 200W/m $^{\!2}$ according to EN 60904-1.

CERTIFICATION







ELECTRICAL DATA @ STC	TSM-135 PC 20	TSM-140 PC 20
Peak Power Watts-P _{MAX} (Wp)	135	140
Power Output Tolerance-P _{MAX} (%)	-3/+3	-3/+3
Maximum Power Voltage-V _{MP} (V)	17.6	17.9
Maximum Power Current-I _{MPP} (A)	7.68	7.83
Open Circuit Voltage-Voc (V)	22.0	22.3
Short Circuit Current-Isc (A)	8.15	8.30
Module Efficiency η _m (%)	13.4	14.0

Values at Standard Test Conditions STC (Air Mass AM1.5, Irradiance 1000W/m², Cell Temperature 25°C).

MECHANICAL DATA		
Solar cells	Multicrystalline 156 × 156mm (6 inches)	
Cells orientation	36 cells (4 × 9)	
Module dimension	1500 × 670 × 40mm (59.1 × 26.4 × 1.57 inches)	
Weight	13kg (28.7 lb)	
Glass	High transmission, low Iron, tempered glass 3.2mm (0.13 inches)	
Frame	Anodized aluminium alloy	
J-Box	IP 65 rated	
Cables / Connector	Photovoltaic Technology cable 4.0mm² (0.006 inches²), 900mm (35.4 inches), MC4 compatibility	

TEMPERATURE RATINGS

Nominal Operating Cell Temperature (NOCT)	46°C (±2°C)
Temperature Coefficient of PMAX	- 0.43%/°C
Temperature Coefficient of Voc	- 0.32%/°C
Temperature Coefficient of Isc	0.047%/°C

MAXIMUM RATINGS

Operational Temperature	-40~+85°C
Maximum System Voltage	1000VDC
Max Series Fuse Rating	15A

WARRANTY

5 years workmanship warranty

25 Years Limited Power Output Warranty

(Please refer to Trina Solar product warranty for details)

PACKAGING CONFIGURATION

Modules per box 24 pcs

Modules per 40' container 1080 pcs

