



AFR-135

135-Watt Polycrystalline
Photovoltaic Module

African Energy modules are made by some of the world's most sophisticated module manufacturers and are designed for Africa's off-grid solar charging and water pumping needs. The modules include efficient crystalline cells set in a solid aluminium frame and feature TÜV and IEC certification. With a 25 year warranty, these modules can provide power for several generations - and the quality is assured by African Energy's decade of experience in the solar industry.

ELECTRICAL CHARACTERISTICS at STC*

Maximum Power at STC (Pmax) [Wp]	135
Voltage at Pmax (Vmp) [V]	17.8
Current at Pmax (Imp) [A]	7.58
Open Circuit Voltage (Voc) [V]	21.9
Short Circuit Current (Isc) [A]	8.56
Fuse Rating [A]	12
Maximum System Voltage	1000
Power Tolerance	+/-3%

PHYSICAL CHARACTERISTICS

Solar Cells (mm)	Poly - 156 x 156
Number of Cells	36
Junction Box Protection Class	Ip65
Connector	MC4 Compatible
Cables (Length [mm] / Section [mm ²])	600/4
Dimensions [mm]	1482 x 680 x 35
Weight [kg]	12.2



THERMAL CHARACTERISTICS

NOCT**	47 +/-2 °C
Temperature Coefficient of Pmax	-(0.5 + -0.05) /°C
Temperature Coefficient of Voc	-(2.23+/-0.1) mv/°C
Temperature Coefficient of Isc	0.065 +/-0.015%/°C
Operating Temperature	-40° C~ +85 °C

STC*: Irradiance of 1000W/m², AM1.5 Spectrum and Cell Temperature of 25 °C. NOCT**: Irradiance of 800W/m², ambient temperature 20 °C and wind speed 1 m/s

