



PHOTOVOLTAIC TERRESTRIAL MODULE

PRODUCT DATA SHEET

APV-140/24 (12) M

The APV-140/24(12)M type photovoltaic terrestrial module is designed to provide superior value and performance for residential, commercial and industrial use. With time-tested mono silicon solar cells, it provides cost-effective power for DC loads or, with an inverter, AC loads. With its 72 enhanced-efficiency cells, it efficiently charges 24V batteries in virtually any climate. With 140 or 145 watts of nominal maximum power, it is used in utility-grid supplemental systems for residences, commercial buildings, and centralized power generation as well as in remote systems for applications including telecommunications, pumping and irrigation, remote villages and homes, and land-based aids to navigation.

Electrical Characteristics *)

Type of solar module	APV-140/24 (12)M
Maximum power Pmax, Wt	140 ± 5
Voltage of open circuit Voc, V	42,4 (9,20)
Current of short circuit Isc, A	4,60 (9,20)
Voltage at maximum power Vmpp, V	33,6 (16,8)
Current at maximum power Impp, A	4,17 (7,76)
Module efficiency, %	13.8
Temperature coefficients	TC(Voc) = -0,33 %/°C; TC(Isc) = +0,27 %/°C; TC(P) = -0,47 %/°C
Operation temperatures, oC	-40..+80
Nominal voltage, V	12
Maximum system voltage, V	1000
Tolerance of parameters, % **	± 5

*) All data at standard test conditions: Irradiance = 1000 W/m²;
air mass = AM 1,5; T = 25 °C.

***) Except maximum power.

Technical Characteristics

Module characteristics

Module dimensions, mm	1585x805x34 ±2mm
Module square, m ²	1,275
Glass thickness, mm	3
Weight, kg	15,2
Cable length, cm	90
Cable section range, mm ²	1,5...4

Life-time: 90% power output over 10 years, 80% output over 20 years.



Cell characteristics

Type of cell	crystalline silicon
Cell dimensions, mm	125x125
Cell format	pseudosquare
Number of cells, pcs	726 (12x4)

This publication summarizes product warranty and specifications, which are subject to change without notice and should not be used as the definitive source of information for final system design. Additional warranty and technical information may be obtained from your local representative.

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