



HYBRID MODULE THERMO-PHOTOVOLTAIC (TPV)

New



RA 32 HYBRID 760W of combined energy

Photovoltaic

- Module **160W**
- High efficiency monocrystalline cells cooled by coolant
- Enhanced life-span
- Hail resistant glass

Self-bearing roof

0,98 m²



Thermal

- Module **600W** in plants with H.P. (heat pump)
- Extruded aluminum collector
- Innovative thermal exchange system
- Water + coolant capacity **8,2 litres**
- **Water flow over 20 lt per min**

The new concept of hybrid energy module, specifically developed to increase electrical efficiency and use thermal energy to feed all sorts of applications.



Manufactured in Italy

Member of CISQ Federation



SIC DIVISIONE ELETTRONICA S.r.l.
Tel +39 0832 365946
Tel & Fax +39 0832 365979/365963
www.sic-divisione-elettronica.it
www.smartcell.it/en/

Address:
Zona Industriale
73100 LECCE (LE) ITALY
info@sic-divisione-elettronica.it

P. IVA (VAT n°): IT-02431730759
Cap. Soc./Stock Capital: € 286.000,00
Reg. Soc. Trib. Lecce 13048
C.C.I.A.A. LECCE 159307



034

TECHNICAL DATA

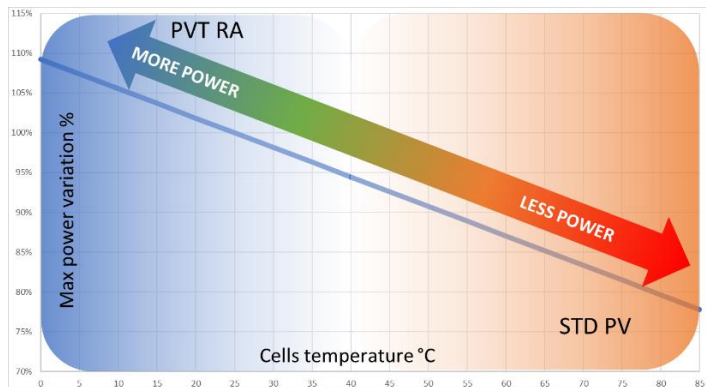
Electrical Specifications STC (Standard Test Conditions)
1.000 W/m² (25±2)°C AM 1,5 EN 60904-3

OVERALL

Lenght mm	2563
Height mm	325
Width mm	43
Inter-axis width mm	310
Weight Kg (full / empty)	31,1 / 22,9
Colour	Black
Power ratio (thermal/electrical)	3,75
Front tempered glass mm	4
Cell encapsulation	E.V.A.
Chassis	Aluminum 6063

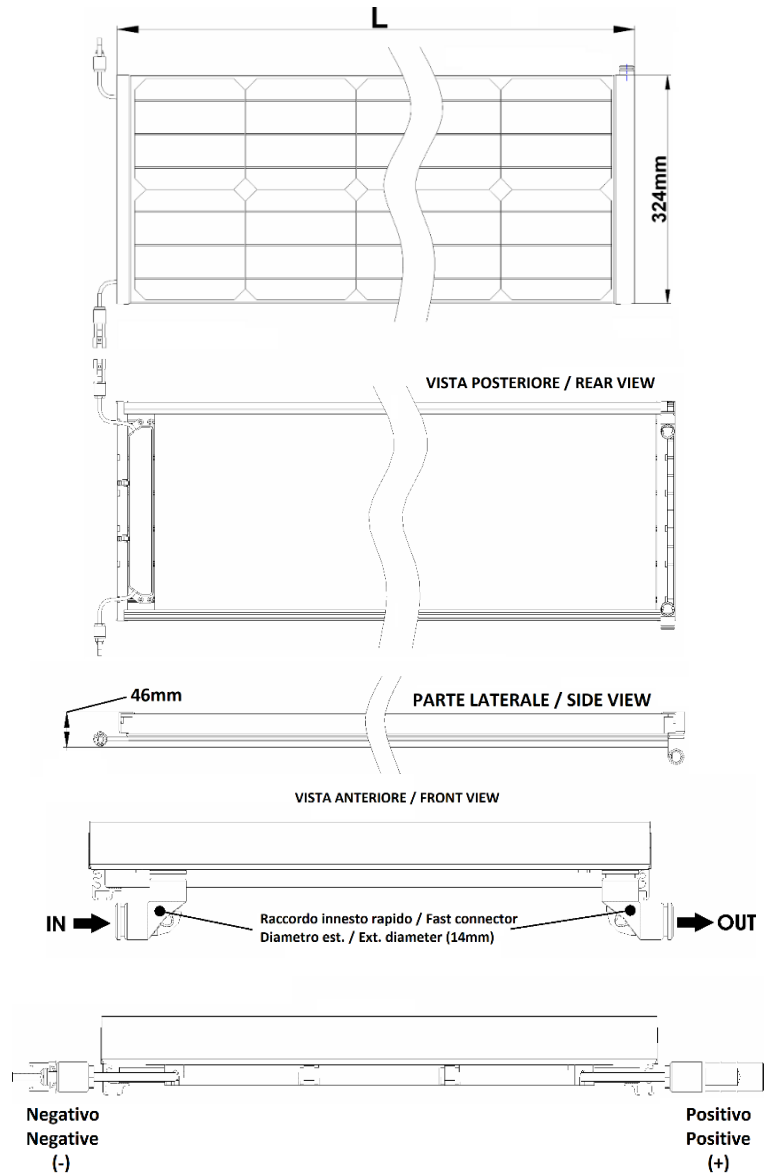
ELECTRICAL

Cells per module	32
Cell type	monocrystalline
Nominal Power ± 3% (Pmax) Wp	160
Power per area W/ m ²	192
Module efficiency η(%)	19,2
Max Voltage U _{MPP} (V)	17,8
Max Current I _{MPP} (A)	9,2
Open Circuit Voltage U _{OC} (A)	21,2
Short Circuit Current I _{SC} (A)	9,6
Max Reverse Current I _R (A)	20
System Max Voltage V _{SYS} (V)	777



The RA module is not affected by temperature variation

- special module-module joining system through a silicone gasket
- 33% reduced space thanks to photovoltaic and thermal combined
- designed for water-proof treadable roofing



THERMAL

Thermal power W	600
Power per area W/ m ²	720
Hydraulic connectors	quick coupling
Pressure (mmH ₂ O)	1
Volume flow rate (l/min)	17
Water + coolant (litres)	8,2
Coolant type	25% glycol pro.
Gross area m ²	0,83
Aperture area m ²	0,82
Absorption area m ²	0,82
Thermal insulation λ=0,037	polystyrene
Max pressure (bar)	1,5

Member of CISQ Federation



SIC DIVISIONE ELETTRONICA S.r.l.
Tel +39 0832 365946
Tel & Fax +39 0832 365979/365963
www.sic-divisione-elettronica.it
www.smartcell.it/en/

Address:
Zona Industriale
73100 LECCE (LE) ITALY
info@sic-divisione-elettronica.it

P. IVA (VAT n°): IT-02431730759
Cap. Soc./Stock Capital: € 286.000,00
Reg. Soc. Trib. Lecce 13048
C.C.I.A.A. LECCE 159307

