



System certifications

- Corporate Quality Management EN ISO 9001:2008
- Environmental Management EN ISO 14001:2004
- Management of Health and Safety at the Workplace BS/OHSAS 18001:2007
- Certificates issued by TUV Rheinland ID:9105084080

Product certifications

- IEC 61215:2005
- EN 61730-1/-2:2007
- Class of reaction to fire I (UNI 9177)
- Safety class II
- Factory Inspection
- Production "made in Italy"
- EC Directives: EMC 2004/108/EC; 2006/95/EC low Voltage

Guarantees

- 12 year warranty against manufacturing defects*
- 25 year linear warranty to 82.5% of the maximum declared power*

*If used and installed according to technical and operational instructions. V-energy Green Solutions Srl reserves the right to make changes to product specifications. This data sheet corresponds to the requirements of Standard EN50380. Rel. 2 11/2017



Measures VE160PVTT Transparent

• Length	1668 mm
• Width	998 mm
• Height	35 mm
• Weight	18 kg
• Frame	Anodized or painted aluminium
• Glass thickness	3,2 mm

Specifications

- Use of tempered glass anti-glare with low iron content and high quality for optimum light collection.
- NOCT = 42,7°C
- Temperature range from -40°C a 85°C
- Mechanical load on surface max 550 kg/m²
- Hail impact resistance ø 25mm a 86 km/h

Measures VE260PVTTFL Transparent Frameless

• Length	1660 mm
• Width	990 mm
• Height	5 mm (on position of junction box 32 mm)
• Weight	19,5 kg
• Frameless	-
• Glass thickness	4 mm

Behavior in standard test conditions STC*

Power class (maximum value)	P _{max}	250 Wp	255 Wp	260 Wp	265 Wp	270 Wp
Efficiency VE160PVTT	η	15,02 %	15,32 %	15,62 %	15,92 %	16,22 %
Efficiency VE260PVTTFL	η	15,21 %	15,52 %	15,82 %	16,13 %	16,42 %
Open-circuit voltage	V _{oc}	37,62 V	38,04 V	38,46 V	38,86 V	39,25 V
Short-circuit current	I _{sc}	8,84 A	8,90 A	8,98 A	9,03 A	9,06 A
Maximum power voltage	V _{mp}	30,53 V	30,91 V	31,32 V	31,72 V	32,11 V
Current at maximum power	I _{mp}	8,25 A	8,30 A	8,35 A	8,38 A	8,43 A

* Note - Under standard conditions: Irradiation 1000 W/mq - Module temperature = 25°C - Air mass AM 1,5
Measurement tolerance solar simulator class A (- / + 2%) in accordance with IEC 60904-9

NOCT conditions behavior**

Power class (maximum value)	P _{max}	184,38 Wp	187,43 Wp	190,58 Wp	193,45 Wp	196,48 Wp
Open-circuit voltage	V _{oc}	33,84 V	34,04 V	34,35 V	34,65 V	34,94 V
Short-circuit current	I _{sc}	7,25 A	7,31 A	7,37 A	7,43 A	7,49 A
Maximum power voltage	V _{mp}	27,52 V	27,81 V	28,15 V	28,49 V	28,81 V
Current at maximum power	I _{mp}	6,70 A	6,74 A	6,77 A	6,79 A	6,82 A

**Note - Under NOCT conditions: Irradiation 800 W/mq - Module temperature = 42,7°C - Air mass AM 1,5

Materials used

Cells per module	60
Cell type	4BB Polycrystalline
Cell size	156,75 mm x 156,75 mm
Front side	Anti-glare tempered glass (EN 12150)
Back side	Backsheet transparent

Thermal characteristics

NOCT	42,7 +/- 2°C
TC I _{sc}	3,425 mA/°C
TC U _{oc}	-0,138 V/°C
TC P _{mpp}	-0,43 %/°C

Parameters for optimal integration into the system

Maximum system voltage class II	1000 V
Load capacity of reverse current	15 A
High snow loads (standard IEC 61215)	max 5,4 kN/m ²
Number of bypass diodes	3

More Info

Transparency	6% (VE160PVTT) - 12% (VE260PVTTFL)
Sorting tolerance P _{max}	0/+4,99 W
Type of protection (IP)	IP65
Connector	MC4/TYCO®
Cable	Solar cable 4mm ² - Length 1m

