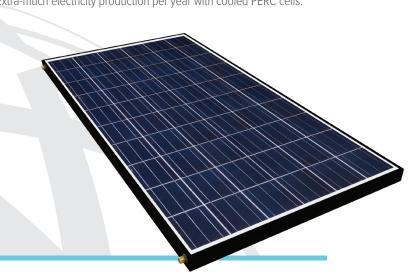
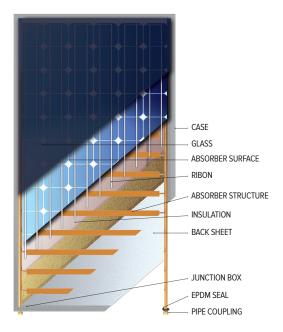




EXCELL

Electricity and usable thermal hot water at the same time from one panel. Extra-much electricity production per year with cooled PERC cells.





TECHNICAL SPEIFICATIONALS OF HYBRID COLLECTORS

Specifications / Product Code	WOLTHER EXCELL PVT
Dimensions	1670x 1005 x 60mm
Weight	28,44 kg
Gross Area	1,673 m ²
Number Of Cells	60 (6x10)
Cell Dimensions (mm)	158,75x158,75
Nominal Power (Wp)	325 W
Glazing	Pv Glass
Absorber Surface (PV)	Mono
Absorber Surface (T)	Copper
Safety Class	II
Maximum over current protection rating	15A
Power tolerance, current tolerance and voltage tolerance	3%
Volume of heat transfer fluid	0,85 L
Imp (A) Nominal Current	9.62 A
lsc (A) Short Curcuit Current (5%)	10.17 A
Vmp (A) Nominal Voltage	34.30 V
Voc (V) Open Curcuit Current (5%)	41.67 V
Welding Type	Laser
Absorber Tube Diameter	8,0 mm
Absorber Tube Thickness	0,45 mm
Manifolt Tube Diameter	18 mm
Manifolt Tube Thickness	0,70 mm
Tube Number	7
Tube Distance	130 mm
Max. Operation Pressure	8,6 bar
Test Pressure	13 bar

*All electrical data shall be shown as relative to standard test conditions (STC) (1 000 W/m2, (25 ± 2) °C, AM 1,5 according to IEC 60904-3 and IEC TS 61863).

*Stagnation temperature at 1000W/m2 and 30°C -> 70°C



Typical Electrical Parameters	Unit	MR325M-60C/M
Nominal power at STC, Pmax	W	325
Power Tolerance at STC	%	±3
Voltage at Pmax, Vmp	V	34.30
Current at Pmax, Imp	Α	9,62
Open Circuit Voltage, Voc (± 3%)	V	41.67
Short Circuit Current, Isc (± 3%)	Α	10.17
Maximum System Voltage	V DC	1000
Temperature Coefficient of Pmp	%/°C	0.048
Temperature Coefficient of Voc	%/°C	-0.255
Temperature Coefficient of Isc	%/°C	-0.0331
Class of Protection		II
Maximum Series Fuse	А	15

Mechanical Parameters		MRwwwM-60C/M	MRwwwM-/2C/M	
Cell Type		Mono Crystalline		
Cell Size	mm	158.75 x 158.78		
No. Of Cells (Matrix)	pcs	60	72	
Module Overall Dimensions (LxWxT)	mm	1665 x 1002 x 35	1982 x 1002 x 40	
Welght (Approx.)	Kg	19	23.5	
Design Load	Pa	1600		
Fire Performance Type		1		

*Under normal conditions, a photovoltaic module is likely to experience conditions that produce higher current and/or *Under normal conditions, a photovoltaic module is likely to experience conditions that produce higher current and/c voltage than reported at standard test conditions. Accordingly, the values of Isc and Voc. marked on this PV module should be multiplied by a factor of 1,25 when determining component voltage ratings, conductor current ratings, and size of controls (e.g. inverter) connected to the PV output.

*Type or model number designationfor PV: MIR310-335W

*Nominal module operating temperature (NMOT). 36.9 °C

*Performance at NMOT (MOT 06.2). 242.5 W

*Performance at low irradiance (MOT 07) is specified. 63.2 W

*Temperature coefficient for voltage at open-circuit; Beta (%/°C) -0.255 Vd = -0.28%/°C

*Temperature coefficient for maximum power; alpha (%/°C) 0.048 Vd = -0.37%/°C

*Temperature coefficient for short-circuit current; Gamma (%/°C) -0.331 Vd = +0.048%/°C

*The type and ratings of bypass diode to be used (if applicable); = 15A, IP68

*Fire rating: Class C

^{*}Fire rating: Class C

[•] Manufacturer uses one types of junction boxes in the panels it produces. PV-Junction Box model is PV-ZH011-3D (Manufacturer: Zheijang Zhonghuan Sunter) PV-Connector model is PV-JM601 (Manufacturer: Zheijang Jiaming Tianheyuan) $\frac{4mm^2}{4mm^2}$, the connector cables size = 1x $\frac{4mm^2}{4mm^2}$ Temperature Rating = 90° C, $\frac{1000VDC}{4mm^2}$ (according to IEC 62852:2014)

^{*}Country of Manufacturer : Turkey