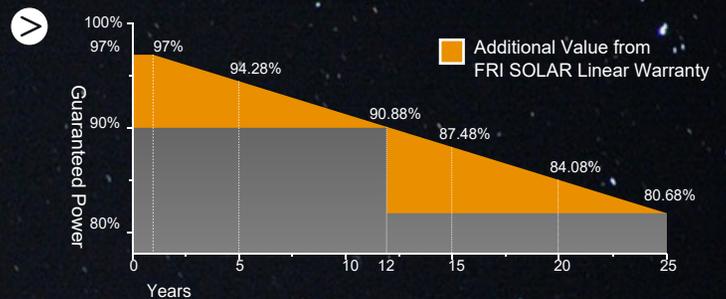


## CP60-4 friline 300-310 Watt Frameless

158mm 60Cells PV Module

**BLACK** \*BLACK FRAME/BLACK BACK-SHEET PRODUCTS ARE AVAILABLE UPON REQUEST

<b>12</b> Years Material & Craft Quality assurance	<b>12</b> Years 90% Output Power guarantee	<b>25</b> Years 80% Output Power guarantee	CPIC 
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### PRODUCT FEATURE

- High transmissivity, low-iron tempered glass.
- Using high efficiency bifacial solar cells
- Excellent performance in low-light environments
- High quality junction box and connector systems
- 100% inspection, to guarantee the reliability of solar systems
- Anti LID
- Anti PID
- Lower temperature coefficient

- Extreme load resistance
- Bifacial cell technology up to +20% more power
- Glass/glass laminate for BIPV use cases
- laminated safety glass acc. EN12600
- hail resistance HW5

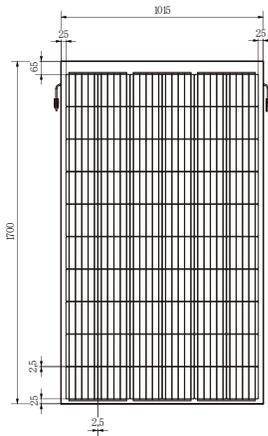
### MANAGEMENT SYSTEM

- ISO 9001 :** Quality management system
- ISO 14001 :** Standard for environmental management system
- OHSAS 18001 :** International standard for occupational health and safety assessment system

### PRODUCT CERTIFICATES



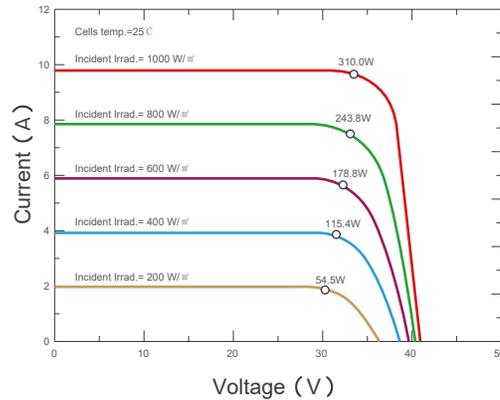
## Dimension Drawing



All Dimensions in mm  
The above drawing is a graphical representation of the product.  
For engineering quality drawings please contact FRI SOLAR.

## I-V Graph

Current-Voltage & Power-Voltage Curves (CP60-4 friline)



## Electrical Characteristics (STC)

Module Type	CP60-4 friline	
	STC	
Maximum Power- Pmax(W)	300	310
Open Circuit Voltage - Voc(V)	40.44	40.98
Short- Circuit Current - Isc(A)	9.25	9.33
Voltage at Pmax -Vmp(V)	34.32	34.86
Current at Pmax - Imp(A)	8.74	8.89
Module Efficiency -ηm(%)	17.39	17.97
Power Tolerance(W)	(0, +4.99W)	
Maximum System Voltage(V)	1000/1500Vdc (IEC / UL)	
Maximum Series Fuse Rating (A)	20A	

STC : Irradiance 1000W/m<sup>2</sup>, Cell Temperature 25°C, Air Mass 1.5

## Mechanical Specifications

External Dimensions	1700*1015*9mm
Weight	35kg
Solar Cells	Mono crystalline 158.75x158.75mm (60pcs)
Front Glass	4mm Ultra white float glass according EN1863
Back Glass	4mm Plain white float glass according EN1863
Junction Box	IP68
Output Cables	4.0mm <sup>2</sup> , 350mm (+), 350mm (-)
Connector	MC4 Compatible

## Temperature Characteristics

Pmax Temperature Coefficient	-0.370%/C
Voc Temperature Coefficient	-0.28%/C
Isc Temperature Coefficient	+0.048%/C
Operating Temperature	-40 ~ +85 C
Nominal Operating Cell Temperature(NOCT)	45±2 C