



REFERENCE		SI-ESF-M-BIPV-GG- P125-48	
ELECTRICAL CHARACTERISTICS		STC	
Maximum Power	[Pmpp]	Wp	135 140 145 150
Power selection	[Pmpp]	Wp	0/+5
Voltage at Maximum Power	[Vmpp]	Volts	24,48 24,96 25,44 25,87
Current at Maximum Power	[Impp]	Amperes	5,52 5,61 5,70 5,79
Open Circuit Voltage	[Voc]	Volts	29,77 30,33 30,86 31,23
Short Circuit Current	[Isc]	Amperes	5,78 5,92 6,03 6,13
Maximum System Voltage	[Vsyst]	Volts	1500 / 1000
Maximum Series Fuse Rating	[Icf]	Amperes	15
Efficiency	[η]	%	15,60 16,17 16,74 17,29
Form Factor	[FF]	%	78,53 77,99 77,93 78,24
ELECTRICAL CHARACTERISTICS		NMOT	
Maximum Power	[Pmpp]	Wp	100 103 107 110
Voltage at Maximum Power	[Vmpp]	Volts	22,29 22,73 23,16 23,55
Current at Maximum Power	[Impp]	Amperes	4,48 4,56 4,63 4,70
Open Circuit Voltage	[Voc]	Volts	27,21 27,72 28,21 28,54
Short Circuit Current	[Isc]	Amperes	4,69 4,80 4,89 4,97
MECHANICAL CHARACTERISTICS			
Dimensions	(X)	mm	808
	(Y)	mm	1072
	(Z)	mm	8
	(area)	m ²	0,87
Weight		kg	15,18
Front		Material	Glass
		mm	3,2
Encapsulant		Material	EVA
		mm	0,38
Cells		Type	poly (mc-Si)
		Size	125 x 125
		Matrix	6 x 8
		Quantity	48
Encapsulant		Material	EVA
		mm	0,38
Rear		Material	Glass
		mm	3,2
JUNCTION BOX			
Protection	Grade	IP	65
Diodes	Bypass	Quantity	4
Cables	(+/ -)	Quantity	4
		Length	900
		Section	4
Connectors	(+/ -)	Type	MC-T4
		Quantity	2
THERMAL CHARACTERISTICS			
Temperature coefficient of short circuit current α	[Isc]	%/° C	0,0825
Temperature coefficient of open circuit voltage β	[Voc]	%/° C	-0,4049
Temperature coefficient of maximum power γ	[Pmpp]	%/° C	-0,4336
Temperature coefficient of current at maximum power	[Impp]	%/° C	0,1
Temperature coefficient of voltage at maximum power	[Vmpp]	%/° C	-0,38
Nominal Module Operating Temperature	[NMOT]	° C	47±2
TOLERANCES			
Working temperature		° C	-40/+85
Dielectric Isolation Voltage		V/DC	3000
Relative humidity		%	0/+100
Wind resistance		Pa	2400
Mechanical load-bearing capacity		Pa	8000
Maximum hail resistance		Ø	28
		m/s	23
Conductivity at ground		Ω	≤ 0,1
Resistance		Ω	≥ 100
CLASSIFICATIONS			
Application		Class	A
Electrical protection		Class	II
Fire resistance		Class	A
Pollution		Degree	1
Material		Group	I
Safety		Factors	1.5
GUARANTEES			
Manufacturing Defects		Years	12
Performance	90% of rated power	Years	12
	80% of rated power	Years	25
DESCRIPTION			
Silicon Cell Photovoltaic Module poly (mc-Si), BIPV-Glass/Glass series, for architectural integration, from the manufacturer SOLAR INNOVA, maximum power (Wp) 135-150 W, voltage at maximum power (Vmpp) 24,48-25,87 V, current at maximum power (Impp) 5,52-5,79 A, open circuit voltage (Voc) 29,77-31,23 V, short circuit current (Isc) 5,78-6,13 A, efficiency 15,60-17,29 %, composed of 48 cells, front layer tempered glass thick 3,2 mm, encapsulating layers of cells EVA, back layer of tempered glass thick 3,2 mm, junction box (diodes, cables 4 mm ² , 900 mm γ connectors MC-T4), working temperature -40/+85 °C, dimensions 808x1072 mm, maximum wind load 2400 Pa, maximum snow load 8000 Pa, weight 15,18 kg.			