



REFERENCE		SI-ESF-M-NE- 110W	
ELECTRICAL CHARACTERISTICS			
		STC	
Maximum Power	[Pmpp]	Wp	110
Power selection	[Pmpp]	Wp	0/3,30
Voltage at Maximum Power	[Vmpp]	Volts	17,60
Current at Maximum Power	[Impp]	Amperes	6,24
Open Circuit Voltage	[Voc]	Volts	21,90
Short Circuit Current	[Isc]	Amperes	6,85
Maximum System Voltage	[Vsyst]	Volts	715
Maximum Series Fuse Rating	[Icf]	Amperes	15
Efficiency	[η m]	%	13,10
Form Factor	[FF]	%	73,21
ELECTRICAL CHARACTERISTICS			
		NMOT	
Maximum Power	[Pmpp]	Wp	81
Voltage at Maximum Power	[Vmpp]	Volts	16,02
Current at Maximum Power	[Impp]	Amperes	5,07
Open Circuit Voltage	[Voc]	Volts	20,02
Short Circuit Current	[Isc]	Amperes	5,56
MECHANICAL CHARACTERISTICS			
Dimensions	(X)	mm	676
	(Y)	mm	1240
	(Z)	mm	35
	(area)	m ²	0,84
Weight		kg	9,53
Frame		Material	Al-6063-T5
		mm	35
Front		Material	Glass
		mm	3,2
Encapsulant		Material	EVA
		mm	0,38
Cells		Type	sc-Si
		Size	156 x 130
		Quantity	36
Encapsulant		Material	EVA
		mm	0,38
Rear		Material	TPT
		mm	0,5
JUNCTION BOX			
Protection	Grade	IP	65
Diodes	Bypass	Quantity	2
Cables	(+/-)	Quantity	2
		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	5400
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	C
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

