



MULTI-CRYSTALLINE SOLAR MODULE
Enfoton 48E6+3bbxxxST
POWER CLASSES 180 - 200



Enfoton Solar modules are designed and manufactured for long, reliable operation and high energy production under all climatic conditions. Top quality European materials, strict quality control procedures, excellent technical characteristics and Enfoton's proven expertise combine to ensure a high overall performance and consistently higher energy yields.

YOUR BENEFITS:

- **POSITIVE PERFORMANCE SORTING**
- **PRODUCT WARRANTY**
10 YEARS
- **PERFORMANCE WARRANTY 1**
10 YEARS WITH MAX. LOSS OF 10% ON POWER RATING
- **PERFORMANCE WARRANTY 2**
25 YEARS WITH MAX. LOSS OF 20% ON POWER RATING
- **HIGHEST QUALITY COMPONENTS AND CONTINUOUS INCOMING QUALITY CONTROL (IQC)**
- **PROFESSIONAL CUSTOMER RELATIONSHIP MANAGEMENT**
- **CERTIFIED ACCORDING TO IEC EN 61215 FOR 5400 Pa**
- **CERTIFIED ACCORDING TO**
IEC EN 61730, SAFETY CLASS II
IEC EN 61215

Electrical data (STC)

STC (Standard Test Conditions): 1000W/m², (25 ±2)°C, AM 1.5 in accordance with EN60904-3

Module Type		48E6+3bb 180ST	48E6+3bb 185ST	48E6+3bb 190ST	48E6+3bb 195ST	48E6+3bb 200ST
Rated Power (Pmpp):	Wp	180	185	190	195	200
Open Circuit Voltage (Uoc):	V	28,35	28,95	29,56	29,81	30,09
Short Circuit Current (Isc):	A	8,13	8,17	8,20	8,34	8,45
Max. Power Voltage (Umpp):	V	24,51	24,54	24,72	24,91	25,25
Max. Power Current (Impp):	A	7,36	7,54	7,7	7,84	7,94
Efficiency		13,57%	13,95%	14,32%	14,7%	15,08%

Electrical data - NOCT

Nominal Operating Cell Temperature: 47°C, 800W/m², AM 1,5

Module Type		48E6+3bb 180ST	48E6+3bb 185ST	48E6+3bb 190ST	48E6+3bb 195ST	48E6+3bb 200ST
Rated Power (Pmpp):	Wp	131	135	138	142	146
Open Circuit Voltage (Uoc):	V	26,41	26,97	27,54	27,77	28,03
Short Circuit Current (Isc):	A	6,60	6,63	6,66	6,77	6,86
Rated Voltage (Umpp):	V	22,83	22,86	23,03	23,21	23,52
Rated Current (Impp):	A	5,74	5,9	6,01	6,12	6,19

Additional electrical data

Classification range (positive classification)	W	-0/+3
Measurement accuracy of Pmpp under STC	%	±2.5
Max. System Voltage		1000V
Reverse Current		20A

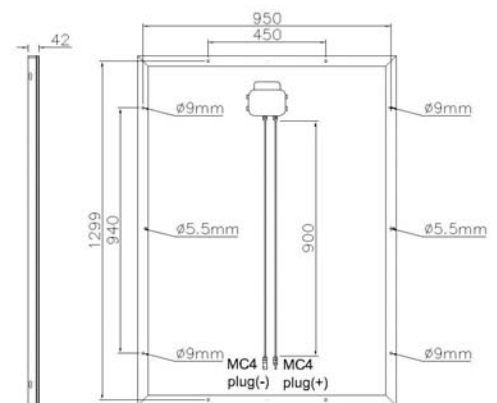
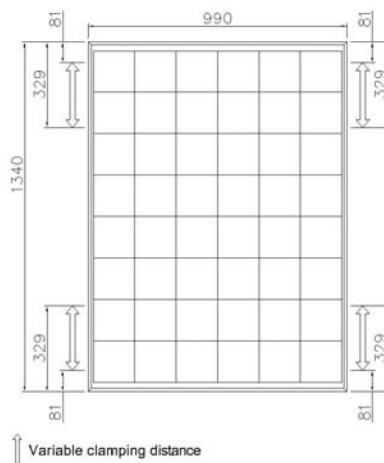
Temperature Coefficients (Tc)

Isc / K	+0,0672%
Uoc / K	-0,3110%
Pmpp / K	-0,4063%



Basic Data

Length x width x height	mm	1340 x 990 x 42
Weight	Kg	18
Number of Cells		48 / 3bus bar
Cell size	mm ²	156 x 156
Cell Material		Multi-crystalline Si
Cell encapsulation		EVA (Ethylene Vinyl Acetate)
Front sheet		Tempered prismatic glass, low iron content 3,2 mm
Back Sheet (white/white)		PET (Polyethylene Terephthalate)
Frame material		Extruded Anodized Aluminum 42 mm
Cable "Flex-Sol-XL"	mm	Length 900 / ø4mm ²
Connectors		MC4
IP class		IP65
Bypass diodes		3 (nominal current 12A)



Performance Warranty 1: 10 years with max. loss of 10% on Power Rating

Performance Warranty 2: 25 years with max. loss of 20% on Power Rating

Product Warranty: 10 years

Permissible operating conditions

Temperature range	-40°C to +85°C
NOCT	47°C
Max. surface load capacity	Tested up to 5400 Pa according TÜV
Resistance against impact	Hail up to max. Diameter of 28mm, 86 km/h



- Qualified, IEC 61215
- Safety tested, EN 61730
- Heavy Snow Load tested
- Periodic inspection

Technical specifications are subject to change. © Enfoton Solar Ltd - 01.12

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