



The value-added modules of the IBC SOLAR Line.

## IBC MonoSol 320 VL5-HC, 325 VL5-HC

First-class solar modules made of monocrystalline half-cut-cells





25 year linear power and 15 year product warranty1



Positive power tolerance (-0/+5 Wp)



Increased mechanical stability (5400 Pa)<sup>2</sup>



German warrantor



100% tested quality



Improved shadowing management thanks to half-cut-technology

## IBC SOLAR - your partner for energy solutions

IBC SOLAR AG has had a successful presence in the photovoltaic market for more than 35 years and is one of the leading international energy companies providing high-performance system solutions in every size and for every application with intelligent photovoltaic systems. The economic strength and financial independence is confirmed by globally recognised rating agencies.

Smart Systems for Solar Power thanks to perfectly matched components. More than 1,000 highly qualified partners around the world, as well as more than 3,000 megawatts of installed power, which supply around 2 million people with solar power, underline the high level of expertise of IBC SOLAR.

IBC SOLAR - leading PV system integrator from Germany since 1982!













## **TECHNICAL DATA**

IBC MonoSol	320 VL5-HC	325 VL5-HC
Article number	2004200019	2004200020

Electrical data (STC):		
STC Power Pmax (Wp)	320	325
STC Nominal Voltage Umpp (V)	33.3	33.4
STC Nominal Current Impp (A)	9.64	9.77
STC Open Circuit Voltage Uoc (V)	40.3	40.4
STC Short Circuit Current Isc (A)	10.14	10.28
Module Efficiency (%)	19.3	19.6
Power Tolerance (Wp)	-0/+5	-0/+5

Electrical data (NOCT):		
800 W/m <sup>2</sup> NOCT AM 1.5 Power Pmax (Wp)	237.6	241.4
800 W/m <sup>2</sup> NOCT AM 1.5 Nominal Voltage Umpp (V)	30.73	30.80
800 W/m² NOCT AM 1.5 Open Circuit Voltage Uoc (V)	37.64	37.69
800 W/m² NOCT AM 1.5 Short Circuit Current Isc (A)	8.24	8.35
Relative Efficiency Reduction at 200 W/m² (%)	3.50	3.50

Temperature coefficient:		
NOCT (°C)	44	44
Tempcoeff Isc (%/°C)	+0.06	+0.06
Tempcoeff Voc (mV/°C)	-112.84	-113.12
Tempcoeff Pmpp (%/°C)	-0.38	-0.38

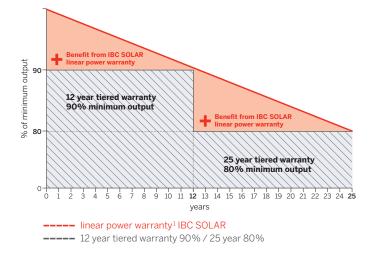
Operating conditions:	
Max. System Voltage (V)	1000
Application Class	A
Reverse Current Ir (A)	20
Current value string fuse (A)	15
Fuse protection from parallel strings	3

Mechanical properties:	
Dimensions (L × W × H in mm)	1675 × 992 × 40
Weight (kg)	19.5
Load capacity (Pa) <sup>2</sup>	5400
Front sheet (mm)	3.2 (low-iron photovoltaic glass and anti-reflective coating)
Frame	anodized aluminium, sturdy hollow-chamber frame
Cells	12 × 10 monocrystalline silicon cells
Connection type	MC4 (IP65)

Warranties and certification:	
Product warranty	15 years <sup>1</sup>
Power warranty	25 years, linear <sup>1</sup>
Certification	IEC 61215, IEC 61730-1/-2, ISO 9001, ISO 14001, OHSAS 18001

Packaging information:	
Number of modules per pallet	26
Number of pallets per 40' container	28
Dimensions incl. pallet (L × W × H in mm)	1705 × 1135 × 1145
Gross weight incl. double pallet (kg)	507

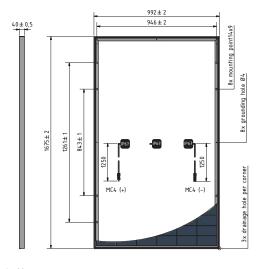
## 25 year linear power warranty by IBC SOLAR



<sup>1)</sup> The linear power and product warranty are only valid for installations within Europe and Japan. The warranty requires installation according to the valid installation instructions. Standard test conditions: 1000 W/m² irradiation with a spectral distribution of AM1.5 and a cell temperature of 25°C. 800 W/m², NOCT. Information according to EN60904-3 (STC). All values according to DINEN50380. Errors and changes reserved.

The precise conditions and content can be taken from the respectively valid version of the product and power warranty, which you can obtain from your IBC Premium Partner.

<sup>2)</sup> Tested according IEC 61215 for snow loads up to 5,400 Pa (5.4 kN/m<sup>2</sup>).



Presented by:

As of: 2018-10-2