POWER BENZ

MONO CRYSTALLINE HALF-CUT MODULE

485 / 490 / 495 / 500 / 510 Watts

Half-Cut Technology Series

Overview

Ground breaking technology: higher power output, improved system performance - the ideal solution for end users who want a fast turnaround on their investments. A fully certified premium quality and high effeciency module made with A Grade materials.







Guaranted mechanical resistance to severe weather conditions

Positive Tolereance

100% electro-luminescence





MARQUE FRANÇAISE







Key Benefits



Certified by Independent **Engineering Bodies**



Product Liability Insurance

Output



Ultra High Power Output



30 Years Limited Product Warranty



Low Resistive Losses



Low LCOE

Tests, Certifications and Warranties

Standard Tests IEC 61215, IEC 61730 ISO 9001: 2015: ISO 14001: 2015 **Factory Quality Tests** Certifications Conformity to CE, PV CYCLE Fire safety Class C according to UL790 Insurance Third party liability insurance Wind and Snow Loads Module certified to withstand extreme wind **Testing** (2400 Pascal) and snow loads (5400 Pascal) Guaranteed +0/+5W (STC condition) **Power Tolerance** Warranties ⊙ 30-year limited product warranty **⊘** 15-year manufacturer warranty on 91.70% of the nominal performance 25-year transferable linear power output

warrantv

Linear Performance Warranty



Decline

Output



MONO CRYSTALLINE HALF-CUT MODULE

PB-xxx-M10HC132-01(xxx=485-510)

Electrical characteristics

Power class (1)		485		490		495		500		505		510		
Testing Condition			STC (2)	NMOT ⁽³⁾	STC	имот	STC	NMOT	STC	имот	STC	имот	STC	имот
Maximum Power	Pmax	[Wp]	485	357	490	360	495	364	500	368	505	372	510	375
Maximum Power Voltage	Vmp	[V]	37,20	34,60	37,40	34,80	37,60	35,00	37,80	35,20	38,00	35,40	38,20	35,60
Maximum Power Current	lmp	[A]	13,04	10,32	13,10	10,35	13,16	10,40	13,22	10,45	13,28	10,51	13,34	10,53
Open Circuit Voltage	Voc	[V]	44,70	41,70	44,90	41,90	45,10	42,10	45,30	42,30	45,50	42,50	45,70	42,70
Short Circuit Current	Isc	[A]	13,68	11,02	13,73	11,07	13,78	11,12	13,83	11,17	13,89	11,22	13,94	11,27
Module Efficiency	Eff	[%]	20	,42	20	,64	21,	85	21,0	06	21,2	. 7	21,4	84
Maximum Series Fuse	Ir	[A]			25									
		D (7												

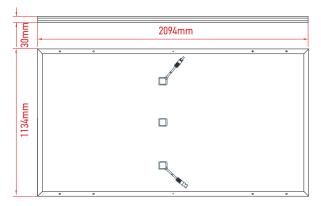
Maximum System Voltage Vsys [V]

1000 / 1500 V

Mechanical Data

Dimensions	2094mm x 1134mm x 30mm
Weight	26.0 Kg
Cell Type	Mono Perc - 182mm x 91mm (2 x 66 Pcs) - M10
Front Glass	3.2mm Tempered and low iron glass + ARC
Rear Side	Anti-aging film
Frame	Anodized Aluminium Alloy
Junction Box	IP68 - 3 Bypass Diodes
Connector	MC4 compaatible
Output Cable	4.0mm² - Landscape: 1300mm
	Portrait: N 200mm/P 300mm or customized

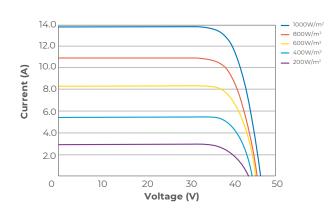
Dimensions



POWER BENZ assumes no liability or responsibility for any typographical error, layout error, misinformation, any other error, omission, contained herein.

I-V Curve

The module relative power loss at low light irradiance of 200W/m² is less than 3%.



Temperature Characteristics

Pmax Temperature Coefficient	-0.36% / °C
Voc Temperature Coefficient	-0.28%/°C
Isc Temperature Coefficient	+0.05%/°C
Operating Temperature	-40~+85 °C
Nominal Operating Module Temperature (NMOT)	42 ± 2 °C

Packing Configuration

40' (HC)
36
22
)x11=792pcs

www.power-benz.com

The specification and key features described in this datasheet may deviate slightly and are not guaranteed. Due to on-going innovation, research and product enhancement, POWER BENZ reserves the right to make any adjustement to the information described herein at any time without notice. Please always obtain the most recent version of the datasheet which shall be duly incorporated into the binding contract made by the parties governing all transactions related to the purchase and sale of the products described herein. Please read the safety and installation instructions before using the modules.

⁽¹⁾ Measurement Tolerances: Pmax ($\pm 3\%$), Isc & Voc ($\pm 3\%$) - Power Classification 0/+5W

⁽²⁾ STC (Standard Testing Condition): Irrandiance 1000W/m², Cell Temperature 25°C, AM 1.5

 $^{(3) \} NMOT \ (Nominal Operating \ Module \ Temperature): Irrandiance \ 800W/m^2, \ NMOT, \ Ambient \ Temperature \ 20^{\circ}C, \ AM \ 1.5, \ Wind \ speed \ 1m/s \ NMOT, \ Ambient \ Temperature \ 20^{\circ}C, \ AM \ 1.5, \ Wind \ Speed \ 1m/s \ NMOT, \ Ambient \ Temperature \ 20^{\circ}C, \ AM \ 1.5, \ Wind \ Speed \ 1m/s \ NMOT, \ Ambient \ Temperature \ 20^{\circ}C, \ AM \ 1.5, \ Wind \ Speed \ 1m/s \ NMOT, \ Ambient \ Temperature \ 20^{\circ}C, \ AM \ 1.5, \ Wind \ Speed \ 1m/s \ NMOT, \ Ambient \ Temperature \ 20^{\circ}C, \ AM \ 1.5, \ Wind \ Speed \ 1m/s \ NMOT, \ NMO$