



**Hanover  
Solar**®

## Half is More

Output più elevato con le nostre Celle Half Cut

**25**  
ANNI

80% di Garanzia sull'output lineare

**30**  
ANNI  
per i Vetro Vetro

**12**  
ANNI

90% di Garanzia sull'output lineare

**12**  
ANNI

Garanzia sul Prodotto

-  Tecnologia Vetro Vetro che riduce le "snail tracks"
-  Tecnologia Half Cut per ridurre i micro-cracks
-  Resistente a Microcrack con- triplo test EL
-  PV Cycle - Programma di Riciclo per l'Olanda
-  Ottimi risultati anche con bassa irradiazione
-  IEC 61215 IEC 61730-1 IEC 61730-2
-  ISO9001 Quality Management System
-  ISO14001 Environmental Management System
-  ISO18001 Occupational Health/Safeth System
-  Tolleranza positiva 0/+5w
-  Anti Light Pollution
-  Protezione contro la grandine da 98 km / h di velocità
-  Anti corrosione da ossidazione
-  Junction Box IP68 con cavi da 1100mm
-  1500V sistema di voltaggio con IEC standard
-  Test di resistenza al Fuoco Livello1 ( Fire Class A )
-  Multi Busbar per massimizzare i risultati
-  Eccellente carico 2400Pa / Neve 5400PA Pannello

[www.hanoversolar.de](http://www.hanoversolar.de) - [info@hanoversolar.de](mailto:info@hanoversolar.de)



Bundesministerium  
für Wirtschaft  
und Technologie





**MONO**  
**Vetro Vetro**  
**Bifacciale**

**30**  
**Anni**

**GARANZIA**

**Alta Efficienza 330W Vetro Vetro**

Fino al 25% di guadagno di potenza in più dal lato posteriore, a seconda dell'albedo

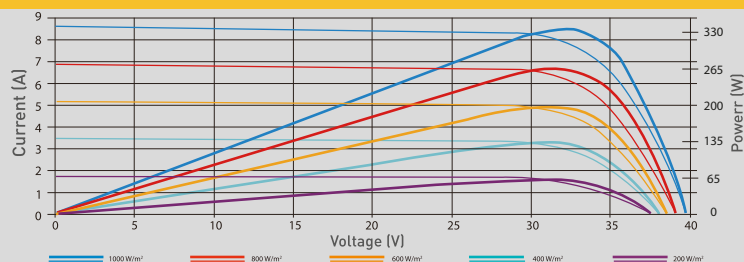
**Caratteristiche Elettriche**

Item No.	Pmax	Vmpp	Imp	Voc	Isc	Cell%
HS330M-30D	330W	38.64V	9.52A	44..32V	9.82A	22.38%

**Caratteristiche Meccaniche**

Celle	Monocristalline (158.5 x 158.5 mm)
Quantità	60 (6 x 10)
Dimensioni	1665 x 1002 x 35 mm
Vetro	2+2 mm
Frame	Alluminio
Junction Box	TÜV IP68 Certificata
Valori Nominali	20A x 3 diodi
Massimo Voltaggio	1500V DC TÜV
Cavi di Uscita	1100 mm / 4.0 mm <sup>2</sup>
Test in condizioni Standard	AM=1.5 E=1000/ m <sup>2</sup> TC=25°C
NOCT	45°C +/- 2°C
Coefficienti di Temperatura: Pmax -0.43%/°C; Voc -0.32%/°C; Isc 0.05%/°C	

**I-V Curve**



**Configurazione Container**

PACKAGE	40GP	PALLET
PCS	812 PCS	58 PCS

Peso 24.3kg

CAUTION: read the installation instruction before using the product.

©2021 Hanover Solar B.V All rights reserved, The specification included in this datasheet are subject to change without notice.

**HANOVER NEW ENERGY PTY LTD**  
7 Koorabel Place  
Baulkham Hills NSW 2153  
AUSTRALIA  
+61 (0) 881 215 838



**HANOVER SOLAR GmbH**  
Herrenstrasse 13  
D30159 Hannover  
GERMANY  
+49 (0) 511 711 090 0539

**HANOVER SOLAR BV**  
Vierlingweg 39A  
Bergen op Zoom 4612PN  
NETHERLANDS  
+31(0) 165 203 842



**MONO  
Half Cut  
Nero**

**25  
Anni**

**GARANZIA**

### Alta Efficienza PERC Half Cut Mono

#### Caratteristiche Elettriche

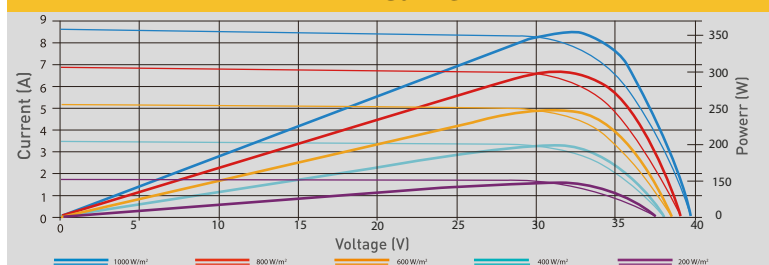
Item no.	Pmax	Vmp	Imp	Voc	Isc	Mod. Efficiency
HS360M-60-166	360W	33.70	10.69A	41.1V	11.53A	19.8%
HS365M-60-166	365W	33.90	10.77A	41.3V	11.63A	20.0%
HS370M-60-166	370W	34.10	10.86A	41.5V	11.72A	20.3%
HS375M-60-166	375W	34.20	10.98A	41.6V	11.85A	20.6%
HS380M-60-166	380W	34.30	11.09A	41.7V	11.98A	20.9%

#### Caratteristiche Meccaniche

Celle	Monocristalline (166 x 83 mm)
Quantità	120 (6 x 20)
Dimensioni	1755 x 1038 x 35 mm
Vetro	Vetro ad Alta Trasmissione
Frame	Alluminio
Backsheet	Nero
Junction Box	TÜV IP68 Certificata
Valori Nominali	20A x 3 diodi
Massimo Voltaggio	1500V DC TÜV
Cavi di Output	1100 mm / 4.0 mm <sup>2</sup>
Test in Condizioni Standard	AM=1.5 E=1000/ m <sup>2</sup> TC=20°C
NOCT	45°C +/- 2°C

Coefficienti di Temperatura: Pmax -0.39%/K Voc -0.29%/K; Isc 0.049%/K

#### I-V Curve



#### Configurazione Container

PACKAGE	40'HQ Container	PALLET
PCS	806 PCS	31 PCS

CAUTION: read the installation instruction before using the product.

©2021 Hanover Solar B.V All rights reserved, The specification included in this datasheet are subject to change without notice.

**HANOVER NEW ENERGY PTY LTD**  
7 Koorabel Place  
Baulkham Hills NSW 2153  
AUSTRALIA  
+61 (0) 881 215 838



**HANOVER SOLAR GmbH**  
Herrenstrasse 13  
D30159 Hannover  
GERMANY  
+49 (0) 511 711 090 0539

**HANOVER SOLAR BV**  
Vierlingweg 39A  
Bergen op Zoom 4612PN  
NETHERLANDS  
+31(0) 165 203 842

Peso 19.5 kg

1038

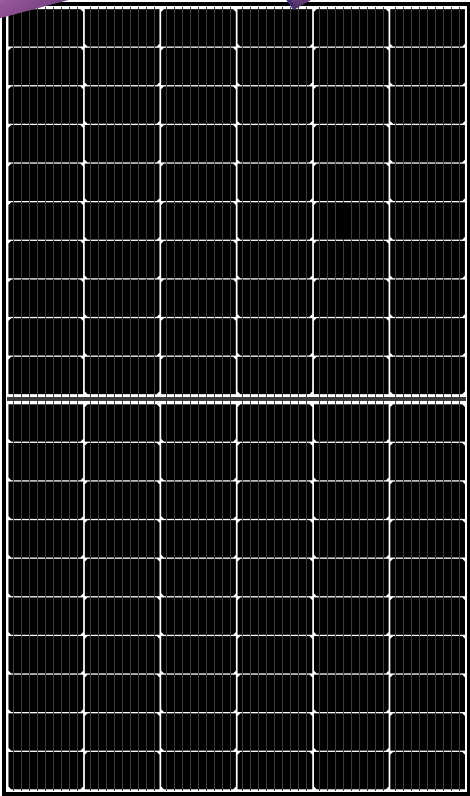
1755



**MONO  
Vetro Vetro  
Bifacciale**

**30  
Anni**

**GARANZIA**



1038

Peso 22.5 kg

### Configurazione Container

PACKAGE	40'HQ Container	PALLET
PCS	935 PCS	36 PCS

### Alta Efficienza PERC Celle Half Cut Mono

Fino al 25% di guadagno di potenza in più dal lato posteriore, a seconda dell'albedo

#### Caratteristiche Elettriche

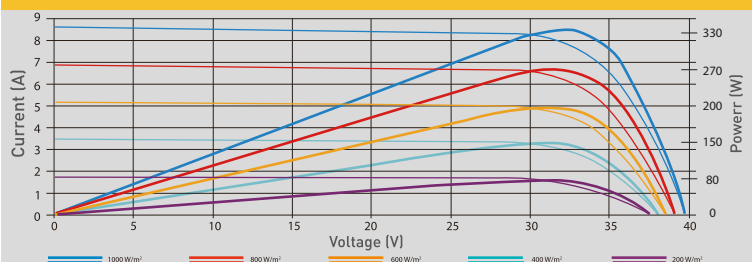
Item no.	Pmax	Vmp	Imp	Voc	Isc	Mod. Efficiency
HS360M-60-166GP-F	360W	33.70	10.69A	41.1V	11.53A	19.3%
HS365M-60-166GP-F	365W	33.90	10.77A	41.3V	11.63A	19.5%
HS370M-60-166GP-F	370W	34.10	10.86A	41.5V	11.72A	19.8%
HS375M-60-166GP-F	375W	34.20	10.98A	41.6V	11.85A	20.1%
HS380M-60-166GP-F	380W	34.30	11.09A	41.7V	11.98A	20.3%

#### Caratteristiche Meccaniche

Celle	Monocristalline (166 x 83 mm)
Quantità	120 (6 x 20)
Dimensioni	1755 x 1038 x 30 mm
Vetro	Vetro ad Alta Trasmissione
Frame	Alluminio
Backsheet	Vetro Trasparente
Junction Box	TÜV IP68 Certificata
Valori Nominali	20A x 3 diodi
Massimo Voltaggio	1500V DC TÜV
Cavi di Output	1100 mm / 4.0 mm <sup>2</sup>
Test in Condizioni Standard	AM=1.5 E=1000/ m <sup>2</sup> TC=20°C
NOCT	45°C +/- 2°C

Coefficienti di Temperatura: Pmax -0.39%/K Voc -0.29%/K; Isc 0.049%/K

### I-V Curve



CAUTION: read the installation instruction before using the product.

©2021 Hanover Solar B.V All rights reserved, The specification included in this datasheet are subject to change without notice.

**HANOVER NEW ENERGY PTY LTD**  
7 Koorabel Place  
Baulkham Hills NSW 2153  
AUSTRALIA  
+61 (0) 881 215 838



**HANOVER SOLAR GmbH**  
Herrenstrasse 13  
D30159 Hannover  
GERMANY  
+49 (0) 511 711 090 0539

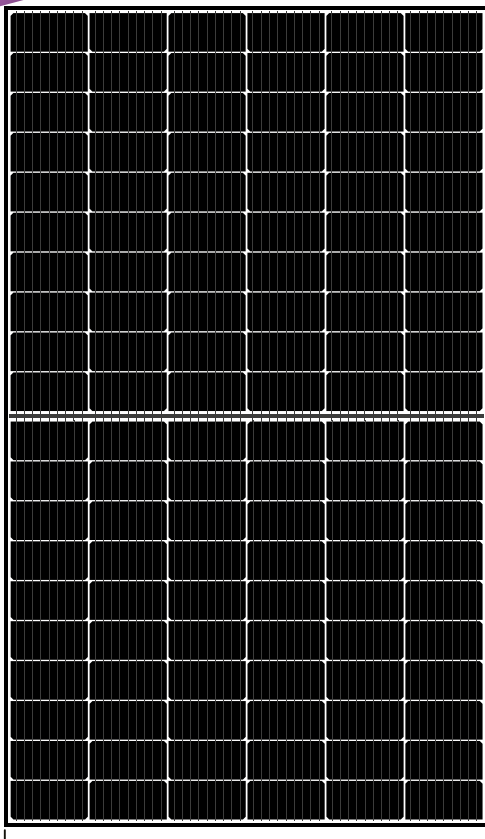
**HANOVER SOLAR BV**  
Vierlingweg 39A  
Bergen op Zoom 4612PN  
NETHERLANDS  
+31(0) 165 203 842



**MONO  
Half  
Cut**

**25  
Anni**

**GARANZIA**



1755

1038

Peso 19.5 kg

**Alta Efficienza PERC Celle Half Cut Mono**

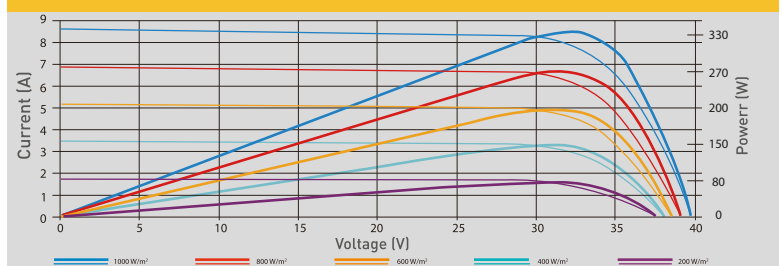
**Caratteristiche Elettriche**

Item no.	Pmax	Vmp	Imp	Voc	Isc	Mod. Efficiency
HS360M-60-166	360W	33.70	10.69A	41.1V	11.53A	19.8%
HS365M-60-166	365W	33.90	10.77A	41.3V	11.63A	20.0%
HS370M-60-166	370W	34.10	10.86A	41.5V	11.72A	20.3%
HS375M-60-166	375W	34.20	10.98A	41.6V	11.85A	20.6%
HS380M-60-166	380W	34.30	11.09A	41.7V	11.98A	20.9%

**Caratteristiche Meccaniche**

Celle	Monocristalline (166 x 83 mm)
Quantità	120 (6 x 20)
Dimensioni	1755 x 1038 x 35 mm
Vetro	Vetro ad alta Trasmissione
Frame	Alluminio
Backsheet	Bianco
Junction Box	TÜV IP68 Certificata
Valori Nominali	20A x 3 diodi
Massimo Voltaggio	1500V DC TÜV
Cavi di Output	1100 mm / 4.0 mm <sup>2</sup>
Test in Condizioni Standard	AM=1.5 E=1000/ m <sup>2</sup> TC=20°C
NOCT	45°C +/- 2°C
Coefficienti di Temperatura: Pmax -0.39%/K Voc -0.29%/K; Isc 0.049%/K	

**I-V Curve**



**Configurazione Container**

PACKAGE	40'HQ Container	PALLET
PCS	806 PCS	31 PCS

CAUTION: read the installation instruction before using the product.

©2021 Hanover Solar B.V All rights reserved, The specification included in this datasheet are subject to change without notice.

**HANOVER NEW ENERGY PTY LTD**  
7 Koorabel Place  
Baulkham Hills NSW 2153  
AUSTRALIA  
+61 (0) 881 215 838



**HANOVER SOLAR GmbH**  
Herrenstrasse 13  
D30159 Hannover  
GERMANY  
+49 (0) 511 711 090 0539

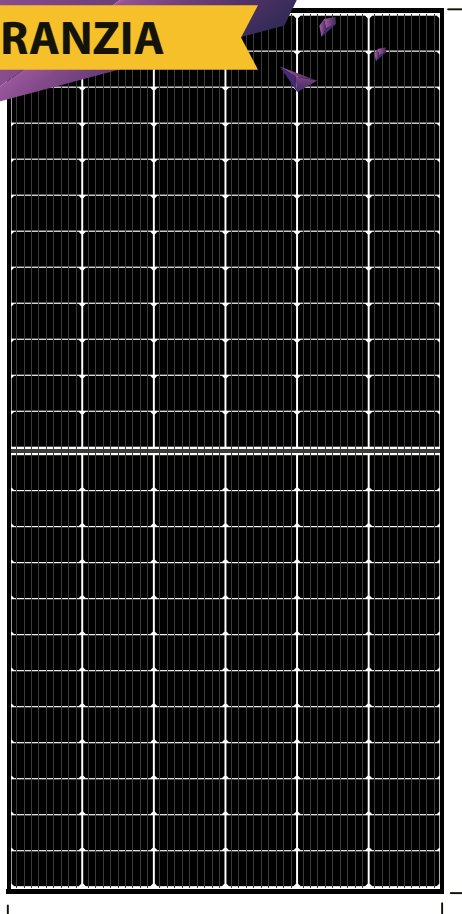
**HANOVER SOLAR BV**  
Vierlingweg 39A  
Bergen op Zoom 4612PN  
NETHERLANDS  
+31(0) 165 203 842



**MONO**  
**Half Cut**  
**144 Cella**

**30**  
**Anni**

**GARANZIA**



1038

2094

Peso 23.5 kg

### Configurazione Container

PACKAGE	40'HQ Container	PALLET
PCS	682 PCS	31PCS

### Alta Efficienza PERC Cella Half Cut Mono

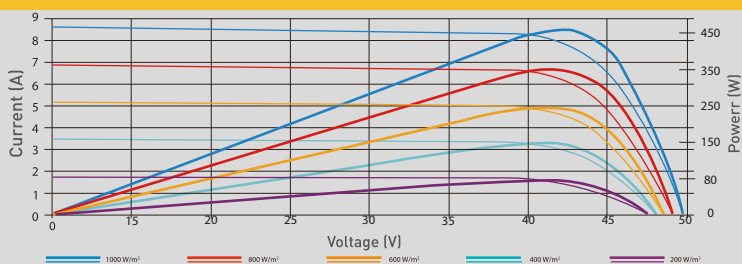
#### Caratteristiche Elettriche

Item no.	Pmax	Vmp	Imp	Voc	Isc	Mod. Efficiency
HS435M-72-166	435W	40.70	10.70A	49.6V	11.53A	20.0%
HS440M-72-166	440W	40.90	10.77A	49.8V	11.60A	20.2%
HS445M-72-166	445W	41.00	10.86A	49.9V	11.72A	20.5%
HS450M-72-166	450W	41.10	10.96A	50.0V	11.83A	20.7%
HS455M-72-166	455W	41.20	11.06A	50.1V	11.96A	20.9%

#### Caratteristiche Meccaniche

Celle	Monocristalline (166 x 83 mm)	
Quantità	144 (6 x 24)	
Dimensioni	2094 x 1038 x 35 mm	
Vetro	Vetro ad alta trasmissione	
Frame	Alluminio	
Backsheet	Bianco	
Junction Box	TÜV IP68 Certificato	
Valori Nominali	20A x 3 diodes	
Massimo Voltaggio	1500V DC TÜV	
Cavi di Output	1100 mm / 4.0 mm <sup>2</sup>	
Test in Condizioni Standard	AM=1.5 E=1000/ m <sup>2</sup> TC=20°C	
NOCT	45°C +/- 2°C	
Coefficienti di Temperatura: Pmax -0.39%/K Voc -0.29%/K; Isc 0.049%/K		

#### I-V Curve



CAUTION: read the installation instruction before using the product.

©2021 Hanover Solar B.V All rights reserved, The specification included in this datasheet are subject to change without notice.

**HANOVER NEW ENERGY PTY LTD**  
7 Koorabel Place  
Baulkham Hills NSW 2153  
AUSTRALIA  
+61 (0) 881 215 838



**HANOVER SOLAR GmbH**  
Herrenstrasse 13  
D30159 Hannover  
GERMANY  
+49 (0) 511 711 090 0539

**HANOVER SOLAR BV**  
Vierlingweg 39A  
Bergen op Zoom 4612PN  
NETHERLANDS  
+31(0) 165 203 842