



# INFINITY ENERGY EUROPE

## APOLLO SERIES 565-590



Half-cut cell technology  
New circuit design,  
lower internal current,  
lower Rs loss



Special circuit design  
with much lower hot spot  
temperature



Fire safety  
(Class C, certified to TÜV  
Rheinland and Rheinland  
test standards)



Resistance to power  
attenuation passed TÜV  
Rheinland system voltage  
endurance test

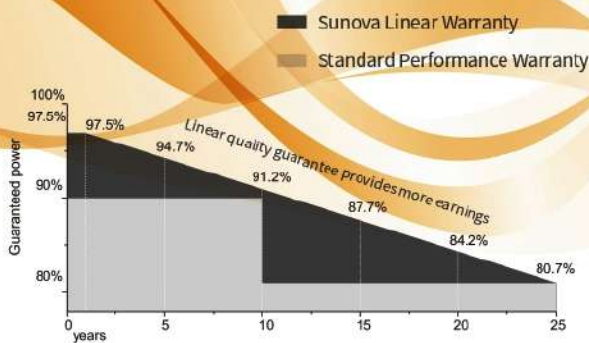


Resistance to salt-spray  
corrosion  
(IEC61701, certified to TÜV  
Rheinland test standard)



100% double EL test  
enabling remarkable  
reduction of hidden crack  
rate of modules

### LINEAR PERFORMANCE WARRANTY



### COMPREHENSIVE CERTIFICATES



ISO 9001: Quality Management System  
 ISO 14001: Environmental Management System Standard  
 OHSAS 18001: International Occupational Health and  
 Safety Assessment System Standard

**15**  
YEARS

Product quality  
& process guarantee

**25**  
YEARS

Linear power  
guarantee

### PRODUCT INSURANCE

**PICC**

# APOLLO SERIES 565-590

## ELECTRIC CHARACTERISTICS

Model of modules	IEE565M		IEE570M		IEE575M		IEE580M		IEE585M		IEE590M	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum power – $P_{mp}$ (W)	565	420	570	424	575	428	580	432	585	435	590	439
Open-circuit voltage – $V_{oc}$ (V)	53.20	50.21	53.32	50.33	53.43	50.43	53.54	50.54	53.65	50.64	53.76	50.75
Short-circuit current – $I_{sc}$ (A)	13.53	10.93	13.61	10.99	13.69	11.06	13.77	11.12	13.85	11.19	13.97	11.27
Maximum power voltage – $V_{mp}$ (V)	43.99	40.91	44.07	41.02	44.22	41.14	44.34	41.29	44.41	41.39	44.49	41.46
Maximum power current – $I_{mp}$ (A)	12.85	10.28	12.94	10.34	13.01	10.41	13.09	10.47	13.18	10.51	13.27	10.59
Module efficiency – $\eta_m$ (%)	20.22%		20.40%		20.58%		20.76%		20.94%		21.12%	
Power tolerance (W)	(0,+5)											
Maximum system voltage (V)	1500V											
Maximum rated fuse current (A)	25											
Current operating temperature (°C)	-40~+85 °C											

**STC** (Standard Testing Conditions): Irradiance 1000W/m<sup>2</sup>, Cell Temperature 25 °C, Spectra at AM1.5

**NOCT** (Nominal Operating Cell Temperature): Irradiance 800W/m<sup>2</sup>, Ambient Temperature 20 °C, Spectra at AM1.5, Wind at 1m/s

## STRUCTURAL CHARACTERISTICS

Module dimensions (L*W*H)	2464 x 1134 x 35mm
Weight	32.1 kg
Number of cells	156 cells
Cell	PERC Monocrystalline 182x91mm
Glass	Tempered, 3.2mm AR, High transmittance, Low iron
Frame	Anodized aluminum alloy
Junction box	IP68
Output wire	4.0 mm <sup>2</sup> , wire length: 1400mm
Connector	MC4 Compatible
Mechanical load	5400 Pa

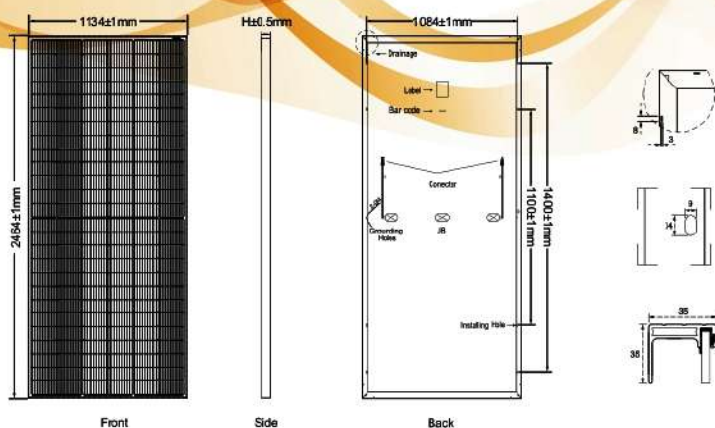
## TEMPERFORMANCE RATINGS

Temperature coefficient ( $P_{max}$ )	-0.35%/°C
Temperature coefficient ( $V_{oc}$ )	-0.28%/°C
Temperature coefficient ( $I_{sc}$ )	+0.048 %/°C
Nominal operating cell temperature	45±2 °C

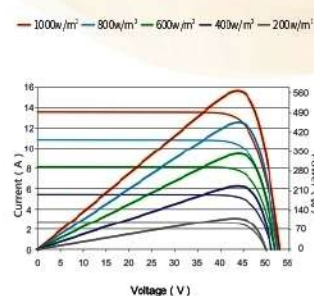
## PACKAGING CONFIGURATION

Container	40HQ
Quantity/pallet	31
Pallets/container	16
Quantity/container	496

## MODULE DIMENSIONS (mm)



Current-Voltage & Power-Voltage Curves (565W)



Temperature Dependence of  $I_{sc}$ ,  $V_{oc}$ ,  $P_{max}$

