



HI-KILO

400-410W

High Efficiency Half-Cell Mono PERC Module (Black Frame)



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 and Rheinland test
standards)



Resistance to power
attenuation passed TÜV
system voltage endurance
test

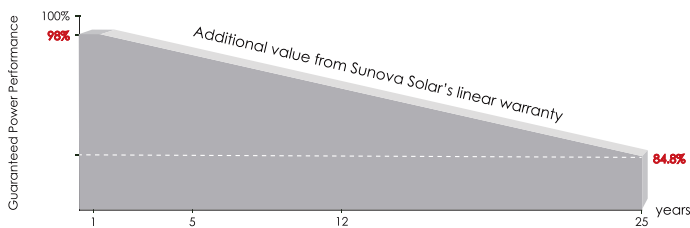


Resistance to salt-spray
corrosion
(IEC61701, certified to
TÜV test standard)



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

LINEAR PERFORMANCE WARRANTY



15 YEARS Product quality & process guarantee

25 YEARS Linear power guarantee

0.55% Annual Degradation Over 25 years

COMPREHENSIVE CERTIFICATES



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

PERFORMANCE INSURANCE



SS-410-54MDH (Black Frame) 108 cells

ELECTRIC CHARACTERISTICS

Model of modules	SS-400-54MDH		SS-405-54MDH		SS-410-54MDH	
	STC	NOCT	STC	NOCT	STC	NOCT
Maximum power — P_{mp} (W)	400	298	405	302	410	305
Open-circuit voltage — V_{oc} (V)	37.18	34.95	37.33	35.09	37.68	35.42
Short-circuit current — I_{sc} (A)	13.39	10.85	13.44	10.89	13.59	11.01
Maximum power voltage — V_{mp} (V)	31.42	29.22	31.55	29.35	31.84	29.61
Maximum power current — I_{mp} (A)	12.74	10.21	12.84	10.29	12.88	10.31
Module efficiency — η_m (%)	20.5%		20.7%		21.0%	
Power tolerance (W)	(0,+5)					
Maximum system voltage (V)	1500					
Maximum rated fuse current (A)	25					
Current operating temperature (°C)	-40~+85 °C					

STC (Standard Testing Conditions): Irradiance 1000 W/m², Cell Temperature 25 °C, Spectra at AM1.5

NOCT (Nominal Operating Cell Temperature): Irradiance 800 W/m², Ambient Temperature 20 °C, Spectra at AM1.5, Wind at 1 m/s

STRUCTURAL CHARACTERISTICS

Module dimensions (L*W*H)	1724 x 1134 x 30 mm
Weight	21.5 kg
Number of cells	108 cells
Cell	PERC Monocrystalline 182x91 mm
Glass	Tempered, 3.2 mm AR, High transmittance, Low iron
Frame	Anodized aluminum alloy
Junction box	IP68, 3 diodes
Output wire	4.0 mm ² , wire length: 300 mm or Customized Length
Connector	MC4 Compatible
Mechanical load	Front Side: 5400 Pa / Rear Side: 2800 Pa
Hailstone Test	25 mm Hailstone at the speed of 23 m/s

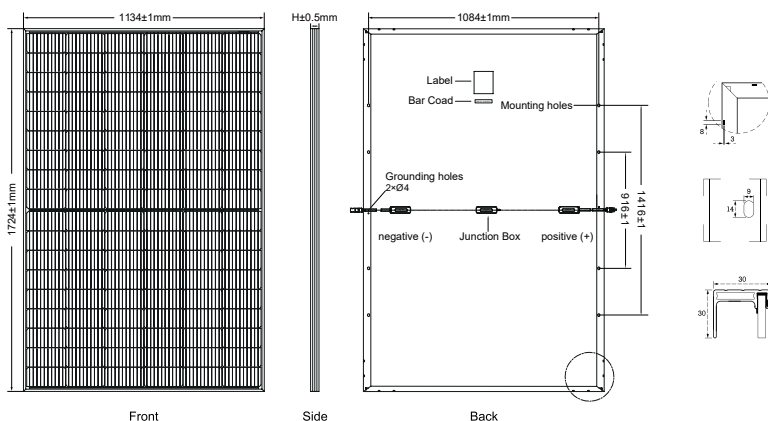
TEMPERFORMANCE RATINGS

Temperature coefficient (P_{max})	-0.35 %/°C
Temperature coefficient (V_{oc})	-0.27 %/°C
Temperature coefficient (I_{sc})	+0.05 %/°C
Nominal operating cell temperature	45±2 °C

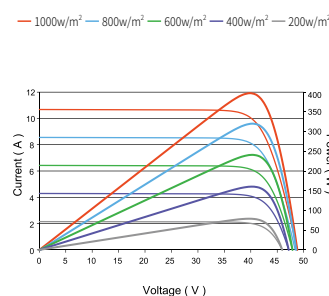
PACKAGING CONFIGURATION

Container	40HQ
Quantity/pallet	36
Pallets/container	26
Quantity/container	936

MODULE DIMENSIONS (mm)



Current-Voltage & Power-Voltage Curves (400W)



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

