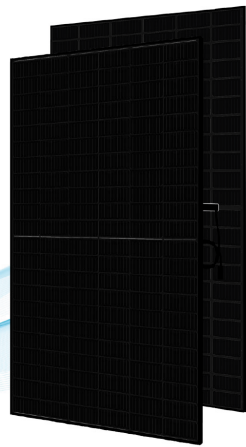


HD HYUNDAI SOLAR MODULE

YH Series Dual Black Max

HIS-S400YH(BK) | HIS-S405YH(BK) | HIS-S410YH(BK)



Maximum Test Load
Front 5,400Pa
Rear 5,400Pa



More Power Generation
in Low Light



UL 1,500V
IEC 1,500V
Saves BOS Costs



High Reliability
in all-weather



For Residential
(Full Black Design)

HD Hyundai's Warranty Provisions



• 25-Year Product Warranty
• Materials and workmanship



• 25-Year Performance Warranty
• Initial year - 98.0%
• Linear warranty after initial year:
with 0.54%p annual degradation,
85.0% is guaranteed up to 25years

Certification



UL E1730 certified by UL
#E167216-2016 Relevance: 40mm by kwia PVEL
#50 9001-2015 Quality management systems
#50 14001-2015 Environmental management systems
#50 45001-2018 Occupational health and safety management systems

Electrical Characteristics

		HIS-SxxxYH(BK)		
Item	Unit	400	405	410
Nominal Output (Pmp) [W]	W	400	405	410
Open Circuit Voltage (Voc) [V]	V	45.3	45.6	45.9
Short Circuit Current (Isc) [A]	A	11.25	11.33	11.40
Voltage at Pmax (Vmpp) [V]	V	37.7	37.9	38.1
Current at Pmax (Impp) [A]	A	10.61	10.69	10.76
Module Efficiency [%]	%	20.0	20.3	20.5
Temperature Coefficient of Pmax [%/K]	%/K	-0.347		
Temperature Coefficient of Voc [%/K]	%/K	-0.268		
Temperature Coefficient of Isc [%/K]	%/K	+0.032		

*All data at STC / Measurement tolerances Pmp±3%; Isc; Voc ±3%. Above data may be changed without prior notice

		Additional Power Gain from rear side, Pmp[W]		
Item		400	405	410
Power Gain	5%	415	425	431
	15%	454	466	472
	25%	494	506	513

Mechanical Characteristics

Dimensions	1,924mm (L) x 1,038mm (W) x 32mm (H)
Weight	21.1 kg
Solar Cells	Mono PERC, 132 (6x22) monocrystalline half-cut bifacial cells
Output Cables	Cable : 4mm ² / 12AWG / (+)1,200mm, (-)1,200mm / Customized length Connector: Staubli MC4 genuine Connector / Compatible, IP68
Junction Box	3-part, 3 bypass diodes, IP68 rated
Construction	Front : 3.2mm full-tempered solar glass with high transmittance, and antireflective coating Rear : highly resistant and weatherproof film (Black mesh transparent)
Frame	Anodized aluminum alloy

Installation Safety Guide

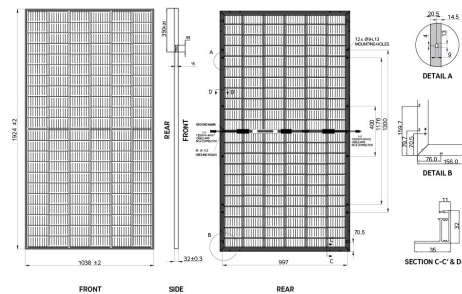
- Only qualified personnel should install or perform maintenance.
- Be aware of dangerous high-DC voltage.
- Do not damage or scratch the rear surface of the module.
- Do not handle or install modules when they are wet.

Nominal Module Operation Temperature	45.5°C ± 2°C
Operating Temperature	-40°C ~ +85°C
Maximum System Voltage	DC 1,500 V
Maximum Reverse Current	20A
Maximum Test Load	Front 5,400Pa Rear 5,400Pa
Fire Performance	Type 1

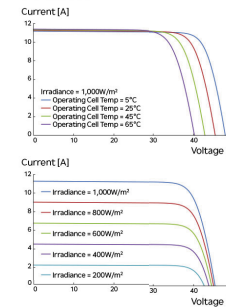
Shipping Configurations

Container Size (H-C)	40'	Modules Per Pallet (pcs)	32
Pallets Per Container	24	Modules Per Container (pcs)	768

Module Diagram (unit : mm)



I-V Curves



Sales & Marketing
hss.sales@hd.com

WITHANAGE PERERA

CONTRACTOR:

ENGINEER: CA33343



1646 W SNOW AVE 9 TAMPA, FL 33606

Ryan S Gittens
2024.09.23
18:04:21
-04'00'
RYAN GITTENS
PE90605

DATE	BY	VER	DESCRIPTION	
09.16.24	BF	1	INITIAL DESIGN	D1
				PAPER: ARCHB
				SCALE:

PROJECT ID: 9162024-1306

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