

# 현대 태양광 모듈

## MI-Series

### Multi-crystalline Type (다결정모듈)

HiS-M275MI | HiS-M280MI | HiS-M285MI | HiS-M290MI | HiS-M295MI

### Mono-crystalline Type (단결정모듈)

HiS-S290MI | HiS-S295MI | HiS-S300MI | HiS-S305MI

## Mechanical Characteristics

Dimensions	987mm (38.86")(W) × 1,965.5mm (77.38")(L) × 50mm (1.97")(H)
Weight	Approx. 29.0kg (63.8 lbs)
Solar cells	72 cells in series (6 × 12 matrix)
Output cables	4mm <sup>2</sup> (12AWG) cables with polarized weatherproof connectors, IEC certified (UL listed), Length 1.2m (47.2")
Junction box	IP65, weatherproof, IEC certified (UL listed)
Bypass diodes	3 bypass diodes to prevent power decrease by partial shade
Construction	Front : High transmission low-iron tempered glass, 4.0mm (0.157") Encapsulant : EVA      Back Sheet : Weatherproof film
Frame	Clear anodized aluminum alloy type 6063

## High Quality

- IEC 61215 (Ed.2) and IEC 61730 by TÜV Rheinland
- UL listed (UL 1703), Class C Fire Rating
- Output power tolerance +3/-0%
- ISO 9001:2000 and ISO 14001:2004 Certified
- Advanced Mechanical Test (5,400Pa) Passed (IEC)  
/ Mechanical Load Test (40lbs/ft<sup>2</sup>) Passed (UL)
- Ammonia Corrosion Resistance Test Passed

## Fast and Inexpensive Mounting

- Delivered ready for connection
- Pre-confectioned cables
- IEC (UL) certified and weatherproof connectors
- Integrated bypass diodes

## Limited Warranty

- 10 years for product defect
- 10 years for 90% of warranted min. power
- 25 years for 80% of warranted min. power

### ※ 보증관련 유의사항

태양광모듈 보증은 현대중공업 로고와 시리얼 넘버가 부착된 정품 제품에만 유효합니다.



# Electrical Characteristics

## | Multi-crystalline Type (다결정모듈) |

		HiS-M□□□MI				
		275	280	285	290	295
Nominal output (Pmpp)	W	275	280	285	290	295
Voltage at Pmax (Vmpp)	V	36.3	36.5	36.7	37.0	37.3
Current at Pmax (Impp)	A	7.6	7.7	7.8	7.9	7.9
Open circuit voltage (Voc)	V	44.0	44.4	44.7	45.1	45.4
Short circuit current (Isc)	A	8.2	8.3	8.3	8.3	8.3
Output tolerance	%	+3/-0				
No. of cells & connections	pcs	72 in series				
Cell type	-	6" Multi-crystalline silicon				
Module efficiency	%	14.2	14.4	14.7	14.9	15.2
Temperature coefficient of Pmpp	%/K	-0.43	-0.43	-0.43	-0.43	-0.43
Temperature coefficient of Voc	%/K	-0.32	-0.32	-0.32	-0.32	-0.32
Temperature coefficient of Isc	%/K	0.048	0.048	0.048	0.048	0.048

※ All data at STC (Standard Test Conditions). Above data may be changed without prior notice.

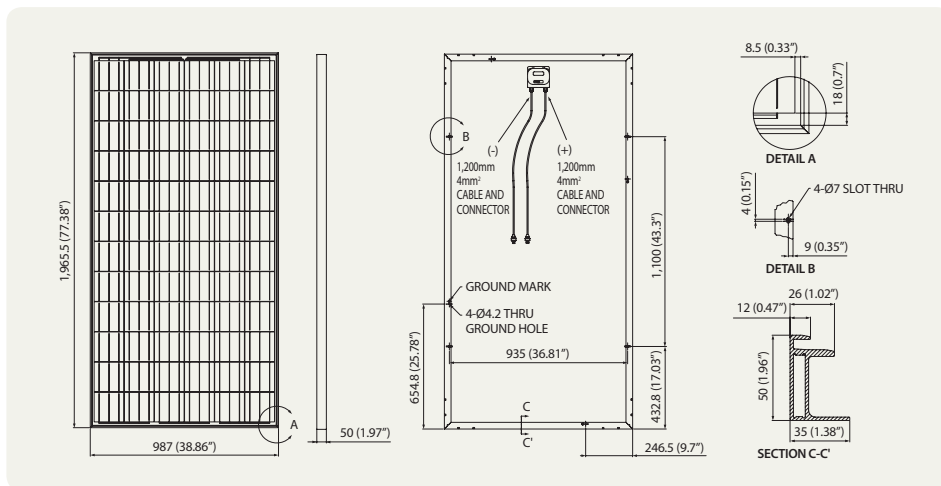
## | Mono-crystalline Type (단결정모듈) |

		HiS-S□□□MI			
		290	295	300	305
Nominal output (Pmpp)	W	290	295	300	305
Voltage at Pmax (Vmpp)	V	37.0	37.2	37.4	37.6
Current at Pmax (Impp)	A	7.9	8.0	8.0	8.0
Open circuit voltage (Voc)	V	45.0	45.1	45.4	45.6
Short circuit current (Isc)	A	8.3	8.4	8.4	8.4
Output tolerance	%	+3/-0			
No. of cells & connections	pcs	72 in series			
Cell type	-	6" Mono-crystalline silicon			
Module efficiency	%	14.9	15.2	15.5	15.7
Temperature coefficient of Pmpp	%/K	-0.45	-0.45	-0.45	-0.45
Temperature coefficient of Voc	%/K	-0.33	-0.33	-0.33	-0.33
Temperature coefficient of Isc	%/K	0.032	0.032	0.032	0.032

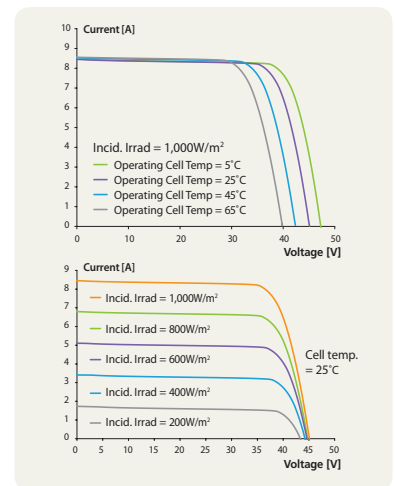
※ All data at STC (Standard Test Conditions). Above data may be changed without prior notice.

## | Module Diagram |

(unit : mm, inch)



## | I-V Curves |

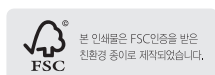


## | 설치시 유의사항 |

- 전문 기술자만이 설치 및 유지·보수 작업을 할 수 있으며 고압 직류전압에 유의하십시오.
- 모듈 뒷면이 상하거나 굽히지 않도록 유의하십시오.
- 모듈은 젖은 상태로 설치하지 마십시오.

Nominal Operating Cell Temperature	46°C ± 2
Operating Temperature	-40 - 85°C
Maximum System Voltage	DC 1,000V (IEC) DC 600V (UL)
Maximum Reverse Current	15A

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