

TECHNICAL SPECIFICATIONS

Electrical Characteristics *		HS-40	HS-50	HS-60	HS-70	HE-74	HS-75	HS-80	HWS-90	HWS-100	HS-110	HS-115
Power (Pm) in Watts (nominal)		40	50	60	70	74	75	80	90	100	110	115
Open Circuit Voltage (Voc) in Volts		21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0
Short Circuit Current (Isc) in Amps		2.54	3.17	3.81	4.44	4.70	4.76	5.08	5.71	6.35	6.98	7.30
Voltage at Maximum Power (Vmp) in Volts		17.0	17.0	17.0	17.0	17	17.0	17.0	17.0	17.0	17.0	17.0
Current at Maximum Power (Imp) in Amps		2.35	2.94	3.53	4.12	4.35	4.41	4.71	5.29	5.88	6.47	6.76
Maximum System Voltage		1000V	1000V	1000V	1000V	1000V	1000V	1000V	1000V	1000V	1000V	1000V
Physical Parameters (Refer drawing below)												
Solar Cells per Module (Units)		36	36	36	36	36	36	36	36	36	36	36
Length x Width x Thickness (L x W x T)	mm	520 x 675 x 35	630 x 675 x 35	740 x 675 x 35	830 x 675 x 35	900 x 675 x 35	900 x 675 x 35	920 x 675 x 35	1035 x 675 x 35	1150 x 675 x 35	1260 x 675 x 35	1305 x 675 x 35
	Inches	20.5 x 26.6 x 1.4	24.8 x 29.1 x 1.4	29.1 x 29.1 x 1.4	32.7 x 26.6 x 1.4	35.4 x 26.6 x 1.4	35.4 x 26.6 x 1.4	36.2 x 26.6 x 1.4	40.7 x 26.6 x 1.4	45.3 x 26.6 x 1.4	49.6 x 26.6 x 1.4	51.4 x 26.6 x 1.4
Weight - Kg		4.80	5.15	6.00	6.95	7.95	7.95	8.30	9.00	10.15	11.30	12.00
Mounting Holes Pitch (Y)	mm (Inches)	260 (10.2)	310 (12.2)	360 (14.2)	410 (16.1)	450 (17.7)	450 (17.7)	450 (17.7)	545 (21.5)	575 (22.6)	645 (25.4)	645 (25.4)
Mounting Holes Pitch (X)	mm (Inches)	629 (24.8)	629 (24.8)	629 (24.8)	629 (24.8)	629 (24.8)	629 (24.8)	629 (24.8)	629 (24.8)	629 (24.8)	629 (24.8)	629 (24.8)
Area - Sq. M / Area - Sq. ft.		0.35(3.76)	0.43(4.63)	0.50(5.38)	0.56(6.03)	0.61(6.66)	0.61(6.66)	0.62(6.67)	0.70(7.53)	0.78(8.40)	0.85(9.25)	0.88(9.47)
Junction Box		IP 65	IP 65	IP 65	IP 65	IP 65	IP 65	IP 65	IP 65	IP 65	IP 65	IP 65

*Measurement Tolerance on Power +/- 5%. All electrical parameters specified at STC : 25°C cell temperature; 100mW/cm² irradiance; AM 1.5

Other Characteristics

Type of Cell : Mono / Multi Crystalline Silicon
 Front Face : Tempered Glass (Low Iron)
 Encapsulate : Ethylene Vinyl Acetate
 Frame : Anodized Aluminium
 Junction Box : Weather Proof Nylon 6
 Temp. Coefficients : Voltage -0.123 V / °K
 Current +4.4 mA / °K
 Power -0.47% / °K
 NOCT : 47+/-2 °C

- Certifications: IEC 61215 / IEC 61730 -1 / IEC 61730 – 2 / TÜV Safety Class II
- The Standard range of modules is supplied without diodes. However, diodes can be provided on specific customer request at extra cost.
- All modules are supplied with screwless Hollow section frames.
- Warranty : Up to 25 Years Limited Extended Warranty
- Due to constant product modifications, WAAREE reserves the right to amend the above specifications without prior notice.

Mounting Details

All dimensions in mm and tolerances ±2mm

