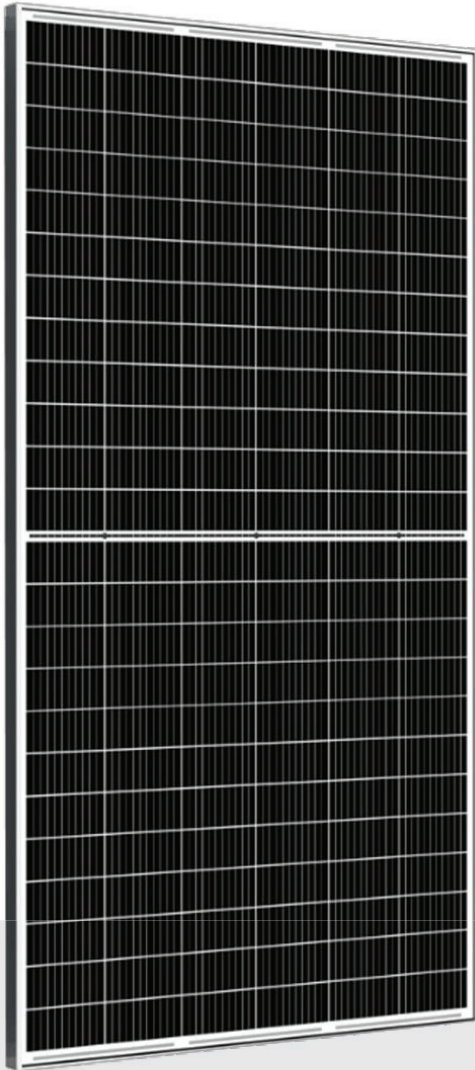









SOLAR MODULES

KNR-R 540 – 550 Wp – MONO PERC 10BB
MONOFACIAL (144 CELLS)



Key Features

-  AR Coated Tempered Glass Anti-Reflective Module Surface
-  Excellent Module Efficiency with Mono PERC cells through 100% Automation
-  Positive Power Tolerance with Current Binning to Prevent Mismatch Losses
-  Pre- and Post- EL Checking With High Resolution Camera
-  IP68 Junction Box for Long Term Endurance
-  100% High Voltage Testing to Ensure Safety
-  MBB Half-Cell Technology provides Better Performance under Partial Shading

PRODUCT CERTIFICATES



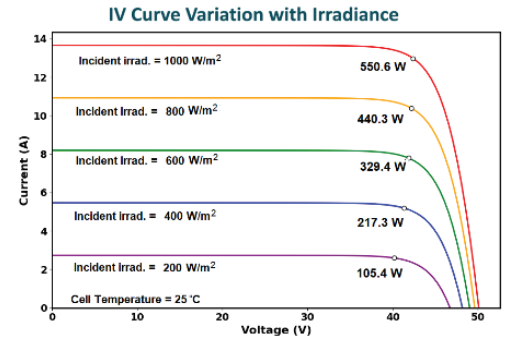
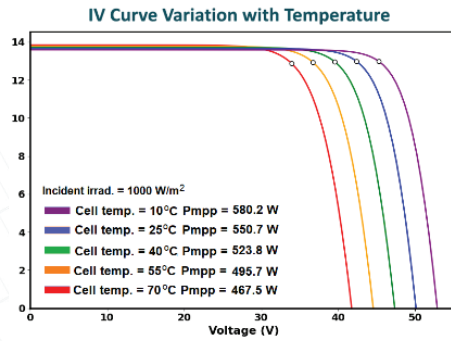
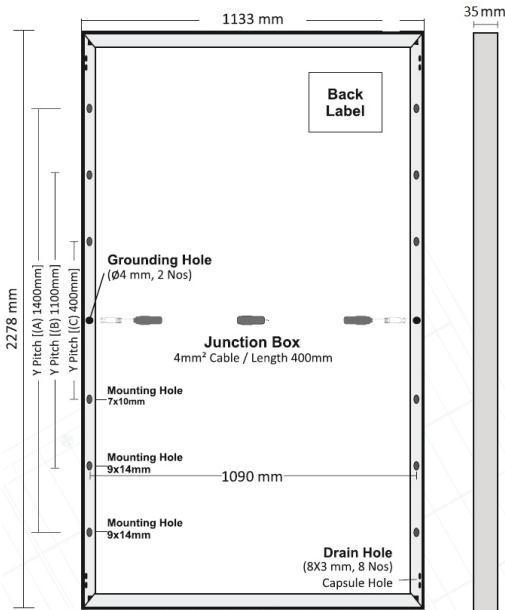
MADE IN INDIA

30 Years
Linear Performance Warranty*

12 Years
Product warranty on materials and workmanship

BACK VIEW

SIDE VIEW



*I-V curves shown for front-side illumination of 550 Wp panel.

ELECTRICAL DATA PERFORMANCE

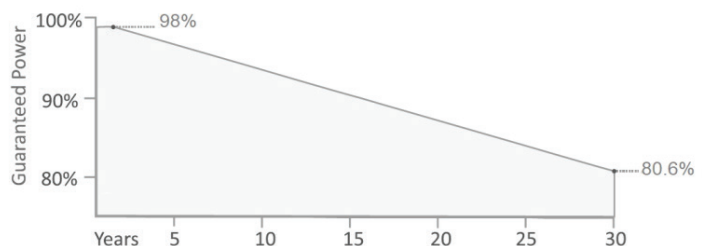
Conditions	Unit	STC	NOCT	STC	NOCT	STC	NOCT
Model number		KNR540WC		KNR545WC		KNR550WC	
Peak Power Pmax(0 ~ + 4.99)	Wp	540 W	400 W	545 W	403 W	550 W	407 W
Maximum voltage	Vmp	41.86 V	38.54 V	42.01 V	38.68 V	42.14 V	38.80 V
Maximum current	Imp	12.91 A	10.37 A	12.98 A	10.43 A	13.07 A	10.49 A
Open circuit voltage,	Voc	49.78 V	46.82 V	49.91 V	46.94 V	50.06 V	47.09 V
Short circuit current,	Isc	13.53 A	10.96 A	13.59 A	11.01 A	13.65 A	11.06 A
Module Efficiency(%)		20.94 %		21.13 %		21.32 %	
Fill Factor		80.24 %		80.39 %		80.54 %	
Operating Temperature(C)		-40°C to +85°C		STACKING STANDARD		20FT	40FT
Maximum system voltage		1500V		No. of Modules per Container:		155	620
Maximum series fuse rating		25A		No. of Pallets per Container:		5	20
Temperature coefficients of Pmax		0.3164 %/°C		Modules per Pallet/Weight:		31 Nos/ 940 Kg	31 Nos/ 940 Kg
Temperature coefficients of Voc		0.2355 %/°C		Pallet Dimensions:		2320*1130*1275	2320*1130*1275
Temperature coefficients of Isc		0.0271 %/°C					

**STC: Irradiance 1000 W/m2 module temperature 25° C, Am=15; NOCT : Irradiance 800 W/m2, ambient temperature 20°C, Am=1.5, Wind speed 1m/s. Average power reduction of 4.5% at 200 W/m2 as per IEC 60904-1. Measuring Uncertainty +/- 3%
 **Power gain from rear side depends upon the ground reflectance (Albedo) & Bifaciality factor

MODULE MECHANICAL DATA

SPECIFICATION	DATA
Dimensions (L x W x H in mm)	2278 x 1133 x 35
Weight (kg)	28.6
No. of Cells	144 Half-cut cells
Frame	Anodized Aluminum Alloy (6063, Temper T5, silver color)
Front Cover	ARC coated Low Iron Tempered Glass (3.2 mm thick)
Back Cover	PVDF Fluoro-polymer Backsheet (white colour)
Junction Box	Split Junction Box (3 nos. with individual Bypass Diode) – Weatherproof (IP68)
Cables	4 sq. mm, 400 mm length (1200 mm available on request)
Connectors	MC4 compatible (MC4 original available on request)
Application Class Rating	Class A
Safety Class Rating	Class II
Mechanical Load Test (as per IEC & UL)	5400 Pa-Front; 2400 Pa-Back

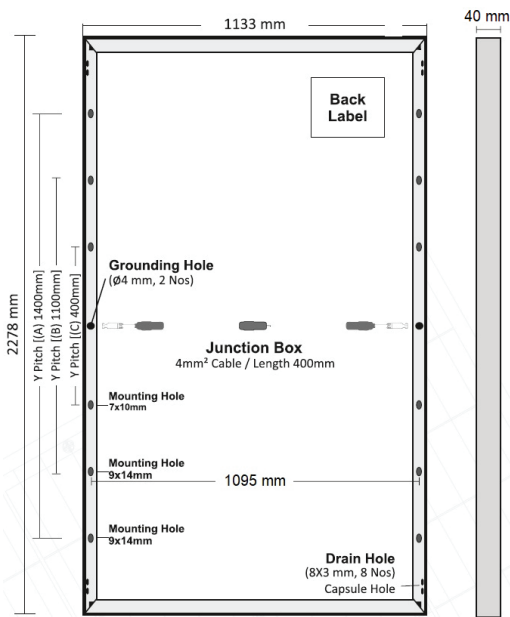
PERFORMANCE WARRANTY



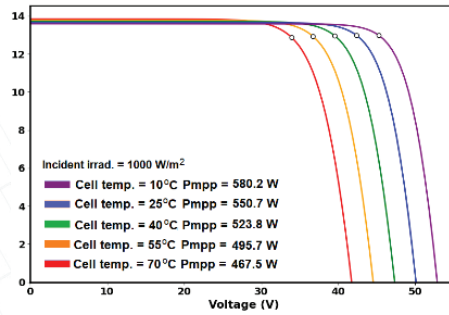
*Graphics shown herein above are for reference purpose only

BACK VIEW

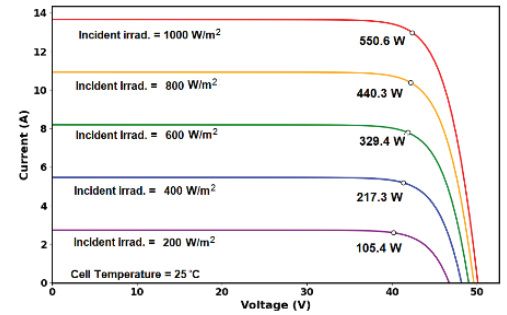
SIDE VIEW



IV Curve Variation with Temperature



IV Curve Variation with Irradiance



*I-V curves shown for front-side illumination of 550 Wp panel.

ELECTRICAL DATA PERFORMANCE

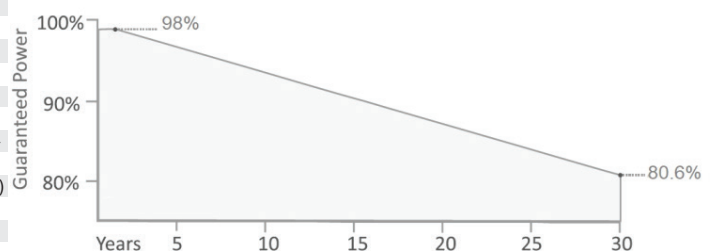
Conditions	Unit	STC		NOCT		STC		NOCT	
		STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Model number		KNR540WC		KNR545WC		KNR550WC			
Peak Power Pmax(0 ~ 4.99)	Wp	540 W	400 W	545 W	403 W	550 W	407 W		
Maximum voltage	Vmp	41.86 V	38.54 V	42.01 V	38.68 V	42.14 V	38.80 V		
Maximum current	Imp	12.91 A	10.37 A	12.98 A	10.43 A	13.07 A	10.49 A		
Open circuit voltage,	Voc	49.78 V	46.82 V	49.91 V	46.94 V	50.06 V	47.09 V		
Short circuit current,	Isc	13.53 A	10.96 A	13.59 A	11.01 A	13.65 A	11.06 A		
Module Efficiency(%)		20.94 %		21.13 %		21.32 %			
Fill Factor		80.24 %		80.39 %		80.54 %			
Operating Temperature(°C)		-40°C to +85°C		STACKING STANDARD		20FT	40FT		
Maximum system voltage		1500V		No. of Modules per Container:		135	540		
Maximum series fuse rating		25A		No. of Pallets per Container:		5	20		
Temperature coefficients of Pmax		0.3164 %/°C		Modules per Pallet/Weight:		27 Nos/ 820 Kg	27 Nos/ 820 Kg		
Temperature coefficients of Voc		0.2355 %/°C		Pallet Dimensions:		2320*1130*1275	2320*1130*1275		
Temperature coefficients of Isc		0.0271 %/°C							

**STC: Irradiance 1000 W/m2 module temperature 25° C, Am=15; NOCT : Irradiance 800 W/m2, ambient temperature 20°C, Am=1.5, Wind speed 1m/s. Average power reduction of 4.5% at 200 W/m2 as per IEC 60904-1. Measuring Uncertainty +/- 3%
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Safety Class Rating	Class II
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PERFORMANCE WARRANTY



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