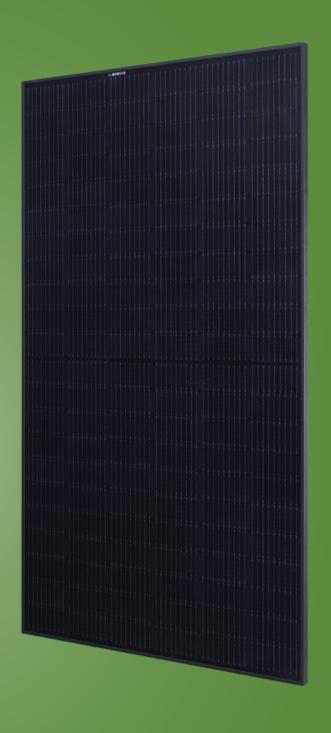


## REC TWINPEAK 5 BLACK SERIES

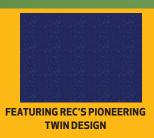
## PREMIUM SOLAR PANELS WITH SUPERIOR PERFORMANCE

REC TwinPeak 5 Black Series solar panels feature an innovative design with high panel efficiency and power output, enabling customers to get the most out of the space used for the installation.

Combined with industry-leading product quality and the reliability of a strong and established European brand, REC TwinPeak 5 Black Series panels are ideal for residential and commercial rooftops worldwide.





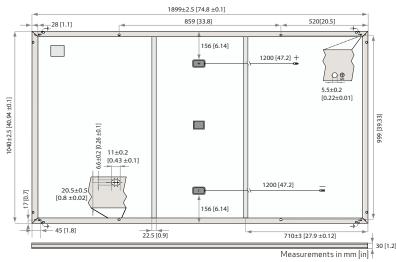






## REC TWINPEAK 5 BLACK SERIE PRODUCT SPECIFICATION

GENERAL DATA				
Cell type:	132 half-cut mono c-Si p-type cells, 6 strings of 22 cells in series			
Glass:	3.2 mm solar glass with anti-reflective surface treatment in accordance with EN12150			
Backsheet:	Highly resistant polymer (black)			
Frame:	Anodized aluminum (black) with silver support bars			
Junction box:	3-part, 3 bypass diodes, lead-free IP68 rated, in accordance with IEC 62790			
Connectors:	$St\"{a}ubli\ MC4\ PV-KBT4/KST4\ (4\ mm^2)$ in accordance with IEC 62852, IP68 only when connected			
Cable:	4 mm² solar cable, 1.2 m + 1.2 m in accordance with EN 50618			
Dimensions:	$1899 \times 1040 \times 30  \text{mm} (1.97  \text{m}^2)$			
Weight:	21.6 kg			
Origin:	Made in Singapore			



	ELECTRICAL DATA		Product Code*: RECxxxTP5 Black			
	Power Output - P <sub>MAX</sub> (Wp)	390	395	400	405	410
	Watt Class Sorting - (W)	0/+5 W	0/+5 W	0/+5 W	0/+5 W	0/+5 W
	Nominal Power Voltage - V <sub>MPP</sub> (V)	36.8	37.2	37.6	38.0	38.3
STC	Nominal Power Current - I <sub>MPP</sub> (A)	10.60	10.62	10.64	10.67	10.71
٠,	Open Circuit Voltage - V <sub>OC</sub> (V)	44.8	44.9	45.0	45.1	45.2
	Short Circuit Current - I <sub>SC</sub> (A)	11.31	11.35	11.39	11.43	11.47
	Panel Efficiency (%)	19.8	20.1	20.3	20.6	20.8
	Power Output - P <sub>MAX</sub> (Wp)	295	298	302	306	310
_	Nominal Power Voltage - V <sub>MPP</sub> (V)	34.4	34.8	35.2W	35.5	35.8
NMOT	Nominal Power Current - I <sub>MPP</sub> (A)	8.56	8.58	8.59	8.62	8.65
Z	Open Circuit Voltage - V <sub>oc</sub> (V)	41.9	42.0	42.1	42.2	42.3
	Short Circuit Current - I <sub>sc</sub> (A)	9.13	9.17	9.20	9.23	9.27

Values at standard test conditions (STC: air mass AM 1.5, irradiance 1000 W/m², temperature 25°C), based on a production spread with a tolerance of  $P_{MAX}$ ,  $V_{0c} \& 1_{sc} \pm 3\%$  within one watt class. Nominal module operating temperature (NMOT: air mass AM 1.5, irradiance 800 W/m², temperature 20°C, windspeed 1 m/s).\* Where xxx indicates the nominal power class ( $P_{MAX}$ ) at STC above.

CERTIFICATIONS	
IEC 61215:2016, IEC 6	51730:2016, UL 61730
ISO 11925-2	Ignitability (Class E)
UL 790	Fire Class C
IEC 62782	Dynamic Mechanical Load
IEC 61215-2:2016	Hailstone (35mm)
ISO 14001, ISO 9001, I	EC 45001. IEC 62941









TEMPERATURE RATINGS*	
NominalModuleOperatingTemperature:	44.6°C (±2°C)
Temperature coefficient of $P_{MAX}\! :$	-0.34 %/°C
Temperature coefficient of $V_{oc}$ :	-0.26 %/°C
Temperature coefficient of $I_{SC}$ :	0.04 %/°C

\*The temperature coefficients stated are linear values

MAXIMUM RATINGS	
Operational temperature:	-40+85°C
Maximum system voltage:	1000 V
Maximum test load (front):	+7000 Pa (713 kg/m²)*
Maximum test load (rear):	- 4000 Pa (407 kg/m²)*
Max series fuse rating:	25 A
Max reverse current:	25 A
*6	. 1 6

\*See installation manual for mounting instructions. Design load = Test load / 1.5 (safety factor)

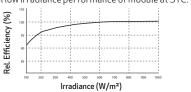
WARRANTY			
	Standard	REC	ProTrust
Installed by an REC Certified Solar Professional	No	Yes	Yes
System Size	All	≤25 kW	25-500 kW
Product Warranty (yrs)	20	25	25
Power Warranty (yrs)	25	25	25
Labor Warranty (yrs)	0	25	10
Power in Year 1	98%	98%	98%
Annual Degradation	0.5%	0.5%	0.5%
Power in Year 25	86%	86%	86%
The REC ProTrust Warranty is	s only availal	hle on nan	els nurchased

through an REC Certified Solar Professional installer. Warranty conditions apply. See www.recgroup.com for more details.

DELIVERY INFORMATION	
Panels per pallet:	33
Panels per 13.6 m truck:	858 (26 pallets)
Panels per 40 ft GP/high cube container	792 (24 pallets)

## **LOW LIGHT BEHAVIOUR**

Typical low irradiance performance of module at STC:



Available from:

Founded in 1996, REC Group is an international pioneering solar energy company dedicated to empowering consumers with clean, affordable solar power. As Solar's Most Trusted, REC is committed to high quality, innovation, and a low carbon footprint in the solar materials and solar panels it manufactures. Head quartered in Norway with operational and solar panels it manufactures are considered in Norway with operational content of the solar materials and solar panels it manufactures. Head quartered in Norway with operational content of the solar materials and solar panels it manufactures. The solar materials are considered in Norway with operational content of the solar materials and solar panels it manufactures. The solar materials are considered in Norway with operational content of the solar materials and solar panels it manufactures. The solar materials are considered in Norway with operational content of the solar materials and solar panels it manufactures. The solar materials are considered in Norway with operational content of the solar materials are considered in Norway with operational content of the solar materials are considered in the solar materials and the solar materials are considered in the solar materials are cons $head quarters \, in \, Singapore, REC \, also \, has \, regional \, hubs \, in \, North \, America, Europe, \, and \, Asia-Pacific.$ 

REC Solar PTE. LTD. 20 Tuas South Ave. 14 Singapore 637312 post@recgroup.com

