N-TYPE MONO CRYSTALLINE HALF CUT MODULE - BACK CONTACT TECHNOLOGY

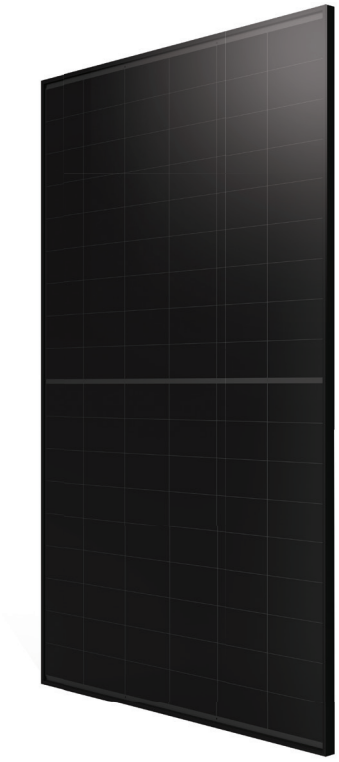
475 / 480 / 485 / 490 / 495 / 500 Watts

BLACK TIGER SERIES

EUROPEAN MANUFACTURER

Overview

Black Tiger modules provide numerous benefits to customers seeking a high-quality product with exceptional performance and aesthetic, captivating design. The "Black Tiger" module utilizes N-Type cell technology in conjunction with a rear connection method known as BackContact. As a result, there is 0% front grid shadow loss, which increases the PV module's yield. Due to reduced shading on the front of the cell, the module maximizes total cell area realizing higher efficiency and resulting in a fast return on investment.



Guaranteed mechanical resistance to severe weather conditions

Wp

Positive Tolerance

EL

100 % electro-luminescence tested

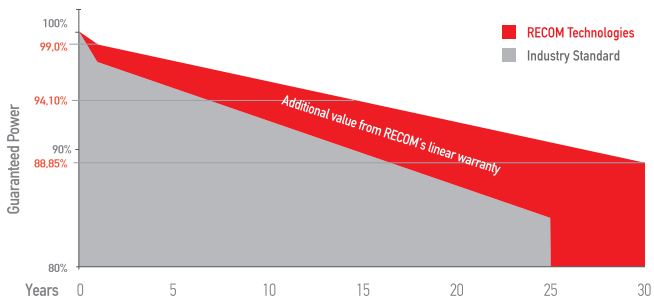
Key Benefits

- Zero Light Induced Degradation
- 25 Years Limited Product Warranty
- 0% Front Grid Shading Loss
- Low Pmax Temperature Coefficient
- Low LCOE
- Higher Light Conversion

Tests, Certifications and Warranties

Standard Tests	IEC 61215, IEC 61730
Factory Quality Tests	ISO 9001: 2015, ISO 14001: 2015
Certifications	Conformity to CE, PV CYCLE Fire safety Class C according to UL790
Wind and Snow Static Loads	Module certified to withstand extreme wind (2400 Pascal) and snow loads (5400 Pascal)
Withstanding Hail	Maximum Diameter of 25 mm with impact speed of 23 m/s
Power Tolerance	Guaranteed +0/+5W (STC condition)
Warranties	• 25-year limited product warranty • 15-year manufacturer warranty on 94,10% of the nominal performance • 30-year transferable linear power output warranty

Linear Performance Warranty



First Year Output	≥ 99.0%	2-30 Year Decline	≤ 0.35%	30 Year Output	≥ 88,85%

Black Tiger

N-TYPE MONO CRYSTALLINE HALF CUT MODULE - BACK CONTACT TECHNOLOGY

RCM-xxx-7RCG (xxx=475-500)

Electrical Characteristics

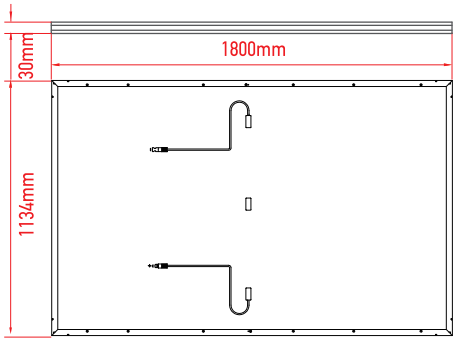
POWER CLASS [1]			475		480		485		490		495		500	
Testing Condition			STC [2]	*NMOT [3]*	STC	*NMOT*	STC	*NMOT*	STC	*NMOT*	STC	*NMOT*	STC	*NMOT*
Maximum Power	Pmax	[Wp]	**475**	*362*	**480**	*365*	**485**	*369*	**490**	*373*	**495**	*377*	**500**	*381*
Maximum Power Voltage	Vmp	[V]	33,16	*31,52*	33,28	*31,63*	33,40	*31,74*	33,51	*31,85*	33,62	*31,95*	33,73	*32,05*
Maximum Power Current	Imp	[A]	14,33	*11,49*	14,43	*11,57*	14,53	*11,65*	14,63	*11,73*	14,73	*11,81*	14,83	*11,89*
Open Circuit Voltage	Voc	[V]	40,18	*38,18*	40,29	*38,29*	40,40	*38,39*	40,52	*38,51*	40,64	*38,62*	40,76	*38,73*
Short Circuit Current	Isc	[A]	15,03	*12,08*	15,13	*12,16*	15,23	*12,24*	15,33	*12,32*	15,43	*12,40*	15,53	*12,48*
Module Efficiency	Eff	[%]	**23,3**		**23,5**		**23,8**		**24,0**		**24,3**		**24,5**	
Maximum Series Fuse	IR	[A]	25											
Maximum System Voltage	VSYS	[V]	1500V DC (IEC)											

(1) Measurement Tolerances: Isc & Voc (± 3%) - Power Classification 0/+5W
(2) STC (Standard Testing Condition): Irrandiance 1000W/m², Cell Temperature 25°C, AM 1.5
(3) NMOT (Nominal Operating Module Temperature): Irrandiance 800W/m², NMOT, Ambient Temperature 20°C, AM 1.5, Wind Speed 1m/s

Mechanical Data

Dimensions	1800 mm x 1134 mm x 30 mm
Weight	21,6 Kg
Cell Type	RC-N-type - 108 (2 x 54 Pcs) - M10
Front Glass	3.2 mm Tempered and low iron glass + ARC
Rear Side	Anti-aging film (Black)
Frame	Anodized Aluminium Alloy (Black)
Junction Box	IP68, 3 Bypass diodes
Connector	MC4 compatible
Output cable	4mm² - Length: 1200 mm

Dimensions



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Temperature Characteristics

Pmax Temperature Coefficient	-0.260% / °C
Voc Temperature Coefficient	-0.200% / °C
Isc Temperature Coefficient	+0.050% / °C
Operating Temperature	-40~+85 °C
Nominal Operating Module Temperature (NMOT)	45 ± 2 °C

Packing Configuration

Container	40'HC
Pieces per Pallet	36
Pallets per Container	24
Pieces per Container	(36+36)x12=864 pcs

**Release RCM-xxx-7RCG(xxx=475-500)-N-M10-30-BB-15V-059-2025-04-v1.0