

# TOPCON MONOCRYSTALLINE 120TN12

- ◆ TT645-120TN12 645 Wp
- ◆ TT640-120TN12 640 Wp
- ◆ TT635-120TN12 635 Wp
- ◆ TT630-120TN12 630 Wp
- ◆ TT625-120TN12 625 Wp
- ◆ TT620-120TN12 620 Wp
- ◆ TT615-120TN12 615 Wp



 **High Conversion Efficiency**  
High panel efficiency to guarantee high power output

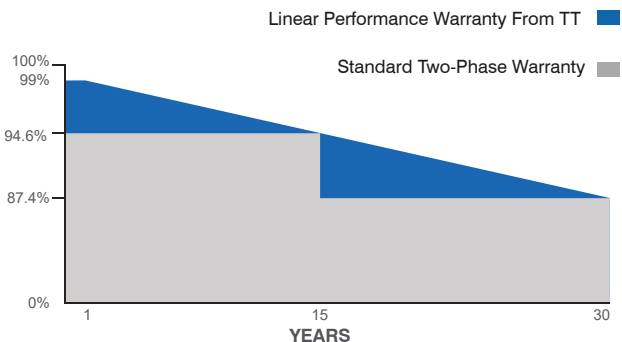
 **Self-Cleaning And Anti-Reflection Glass**  
Coating glass for self-cleaning reduces surface dust

 **Outstanding Low Irradiation Glass**  
Outstanding panel performance even in weak light conditions

 **Excellent Durability**  
Wind load up to 2400 Pa, Snow load up to 5400 Pa

 **0~+5W Positive Power Tolerance**

 **Easy Installation**



 **30 Years Performance Warranty**     **15 Years Product Warranty**

## Half-Cut



IEC 61215, IEC 61730-1, IEC 61730-2  
ISO 9001:2015, ISO 14001:2015, ISO 45001:2018



Model Type	TT615 120TN12	TT620 120TN12	TT625 120TN12	TT630 120TN12	TT635 120TN12	TT640 120TN12	TT645 120TN12
Peak Power (Pmax)	615 Wp	620 Wp	625 Wp	630 Wp	635 Wp	640 Wp	645 Wp
Module Efficiency	21.73	21.95	22.08	22.26	22.44	22.65	22.79
Maximum Power Voltage (Vmp)	35.56	35.76	35.96	36.16	36.36	36.56	36.76
Maximum Power Current (Imp)	17.30	17.34	17.39	17.43	17.45	17.51	17.55
Open Circuit Voltage (Voc)	42.78	42.98	43.18	43.38	43.58	43.78	43.98
Short Circuit Current (Isc)	18.24	18.30	18.35	18.40	18.46	18.52	18.57
Power Tolerance	0~+5W						
Maximum System Voltage	1500V DC						
Operating Temperature	-40 ~ +85°C						
Fire Safety Class	Class II						
Maximum Series Fuse Rating	30A						

## MECHANICAL SPECIFICATIONS

Cell Dimensions(mm)	210x105
Cells per Module(pcs)	120 (6x20)
Weight(kg)	31.0
Panel Dimensions(mm)	2172x1303x35
Max. Wind/Snow Load(Pa)	2400/5400
Junction Box	IP68
Junction Box Cable Length(mm)	350-1600

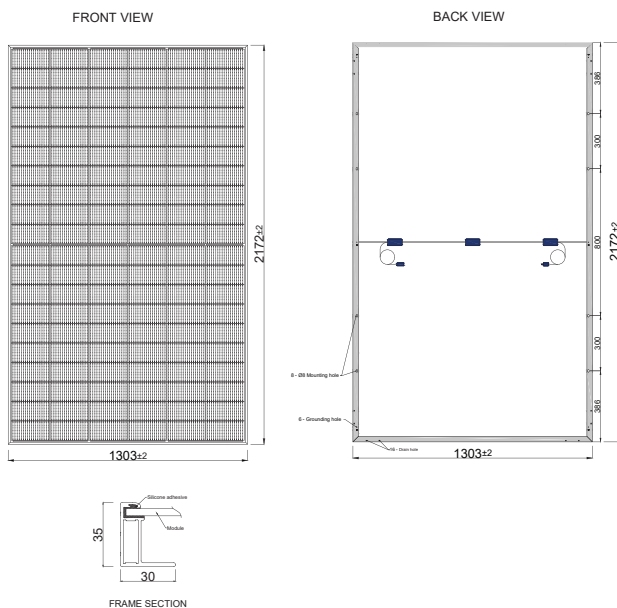
## TEMPERATURE CHARACTERISTICS

Temp. Coeff. of (Isc)	0.040%/°C
Temp. Coeff. of (Voc)	-0.260%/°C
Temp. Coeff. of (Pmax)	-0.320%/°C

## PACKING CONFIGURATION

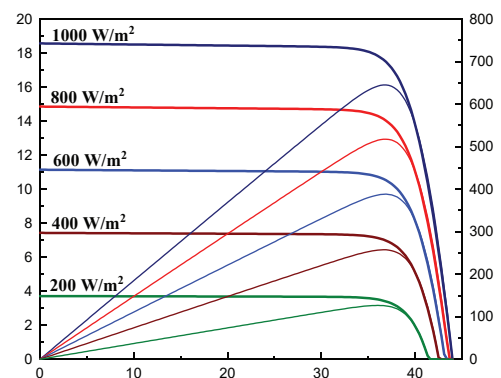
Container	40' GP
Pieces per Pallet	31
Pieces per Container	527
Pallet Per Container	17

## PHYSICAL CHARACTERISTICS



## ELECTRICAL CHARACTERISTICS

Current - Voltage & Power - Voltage Curve (TT645-120TN12)



\* The specifications are obtained under the standard test conditions: 1000W/m2 solar irradiance, 1.5 Air Mass and cell temperature of 25°C. Measurement uncertainty for all panels is 6%. The actual transactions will be subject to the contracts. These parameters are for reference only and it is not a part of the contracts. The technical specifications in this document may vary. For more information, refer to the "Installation Manual".

\* For roof, facades and installations on similar surfaces, solar panels should be mounted over a fire-resistant covering suitable for this application, with adequate ventilation between the back of the solar panels and the mounting surface. Improper installations are hazardous and may spark a fire. Solar panels must not be mounted on structures and roofs which are made of not fire-resistant materials such as plastic layer, transparent plastic, PVC or similar materials without any fire-protection layer. Usage and installation not in accordance with the guidelines as outlined in the installation manual will terminate the warranty. Please refer to the installation manual and the warranty documents for further details.

\* TommaTech® GmbH reserves the right to change the specification of products without prior notice.

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