



 Energy^{U.S.A.}

CW  **Energy^{U.S.A.}**®
Wherever the sun shines



Factory Area
75.000m²



ABOUT US

- CW Energy USA is a pioneering brand shaping the future of the renewable energy sector in America with its innovative approach and expertise in solar energy.
- As part of a globally active solar energy company, CW Energy USA leverages advanced photovoltaic (PV) technology and extensive experience to contribute to sustainable energy solutions in one of the world's largest renewable energy markets.
- Founded on the strong legacy of its parent company, established in 2010, CW ENERJİ MÜH. TİC. VE SAN. A.Ş. boasts an impressive annual production capacity of 1.8 GW. We provide reliable, innovative, and efficient solar energy solutions tailored for both residential and commercial applications.
- Our mission is to create a more sustainable and livable world by delivering clean energy solutions and fostering an environmentally conscious future.

- With strategically located warehouses in New Jersey, Georgia, Texas, and our newly added warehouse in California, we ensure fast delivery and exceptional customer support.
- CW Energy USA offers cutting-edge solar solutions, including high-efficiency TOPCon, PERC Mono, and flexible solar panels, designed to meet the evolving needs of the renewable energy sector.
- Committed to environmental sustainability and continuous technological advancement, CW Energy USA strives to be a trusted partner for all stakeholders in the industry.
- With a strong emphasis on transparency, quality, and excellence, we are dedicated to harnessing the power of the sun to build a sustainable and brighter future for generations to come.





Knowledge Hub

We make knowledge more accessible with our education portal.



Expert Support

Our pre-sales and after-sales support teams are by your side at every step, providing the best solutions.



Global Reach

We export to more than 60 countries.



Project Design

We offer free project design support, with our professional project design team.



Reliable Stock & Fast Delivery

With our ready stock, we respond to your demands quickly.



*You Stay in
Control!*



Sustainability and Environmental Responsibility

Through our investments in renewable energy sources, we reduce our carbon footprint and strive to leave a cleaner world for future generations.



Quality Control from the Very First Step

Starting with raw material production, our quality control ensures unmatched excellence in every detail.



Technology

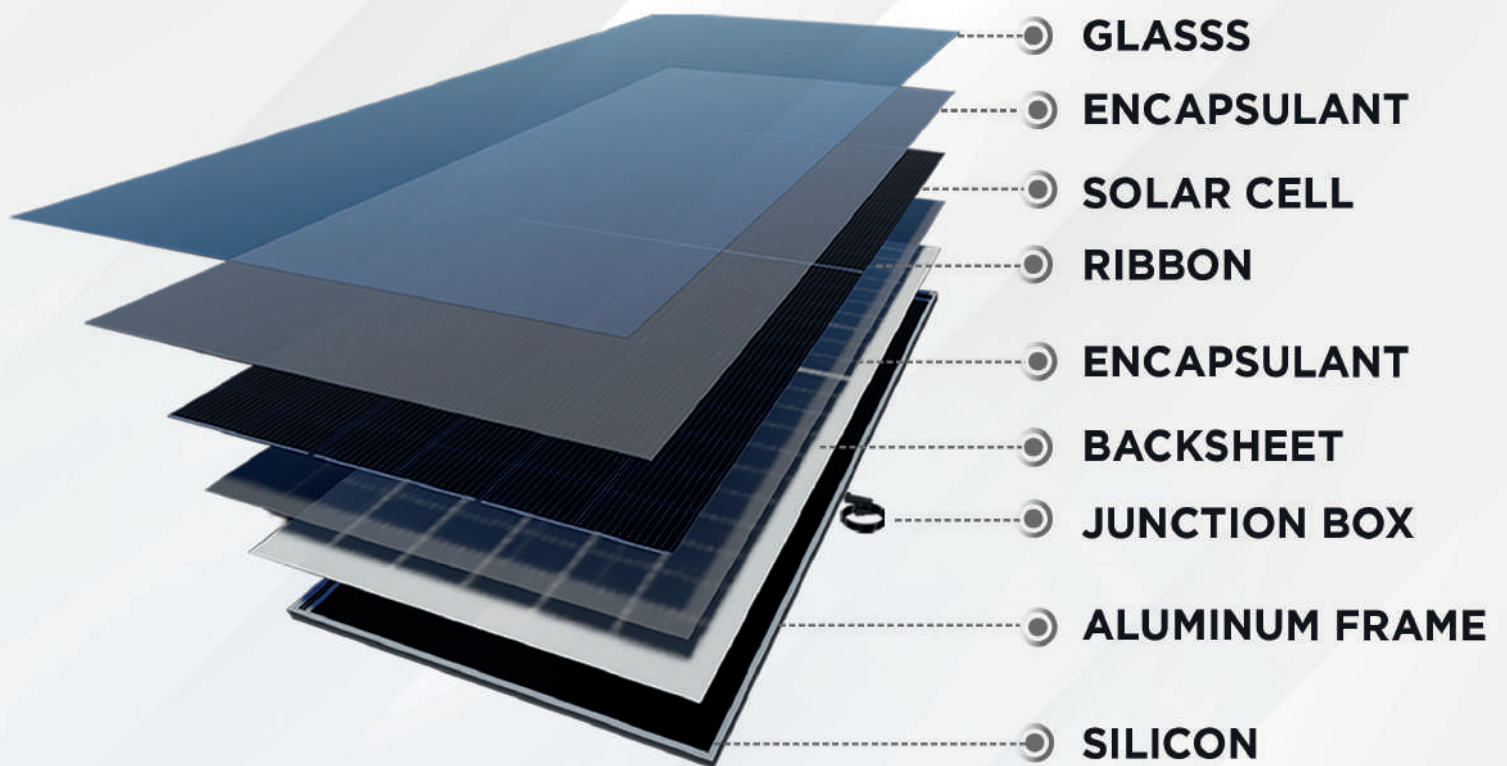
Equipped with state-of-the-art technology, our production facilities utilize the most advanced manufacturing techniques to ensure industrial excellence.



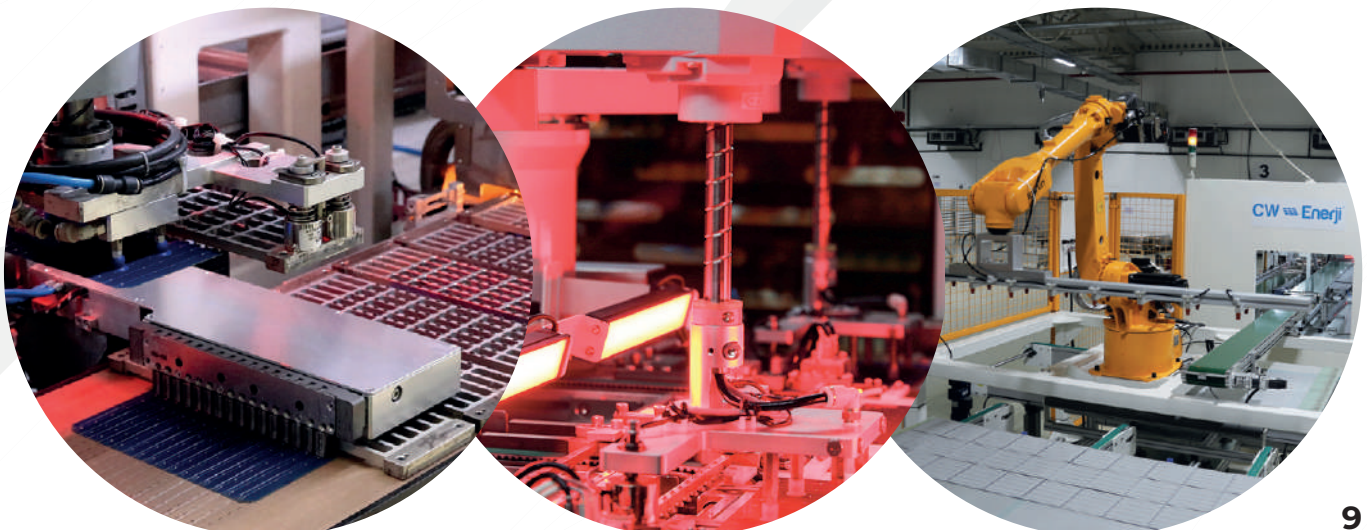
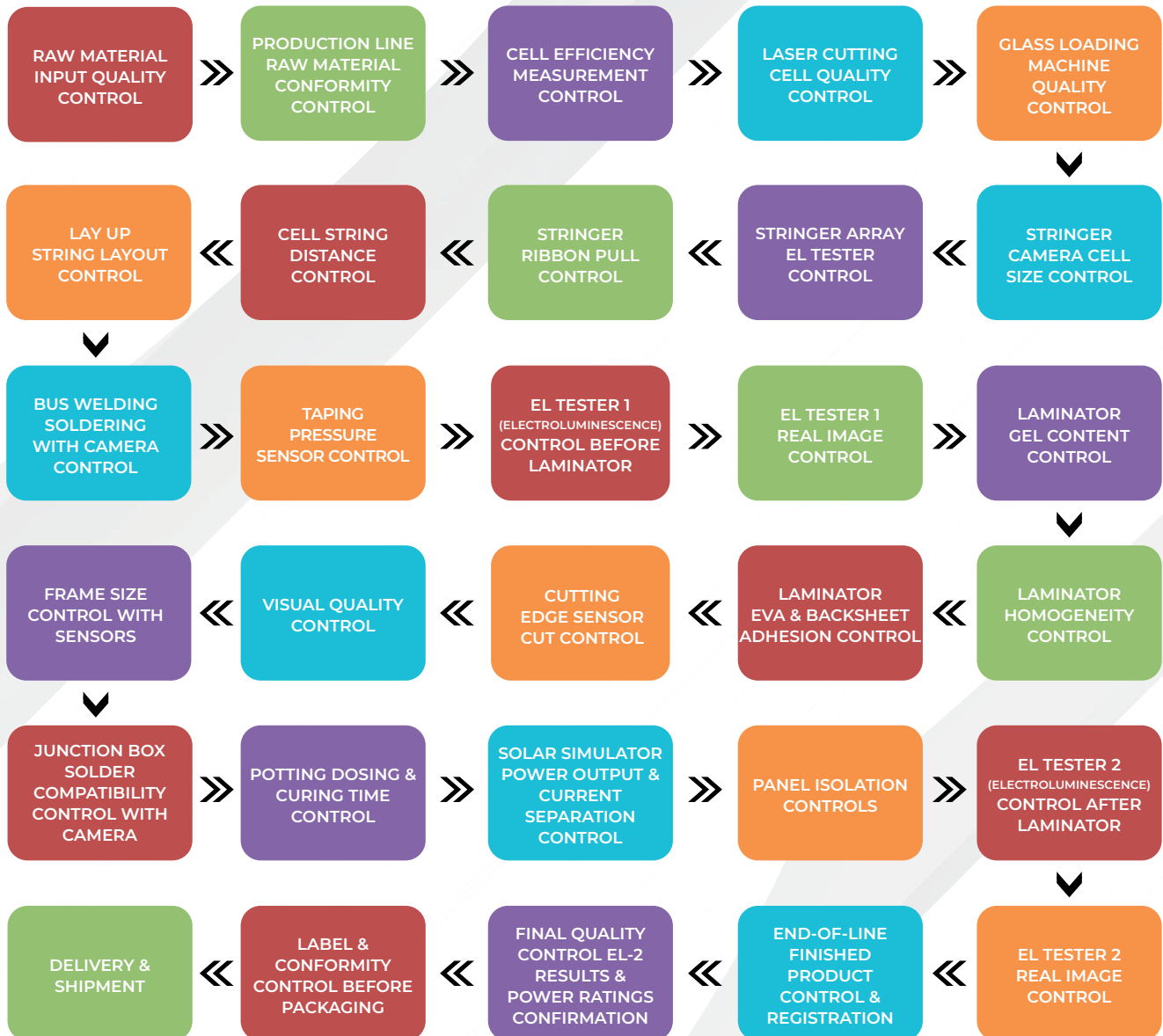
Customer-Centric Approach

We always prioritize the needs of our customers and aim to provide them with the best service.

CW Energy^{U.S.A}®



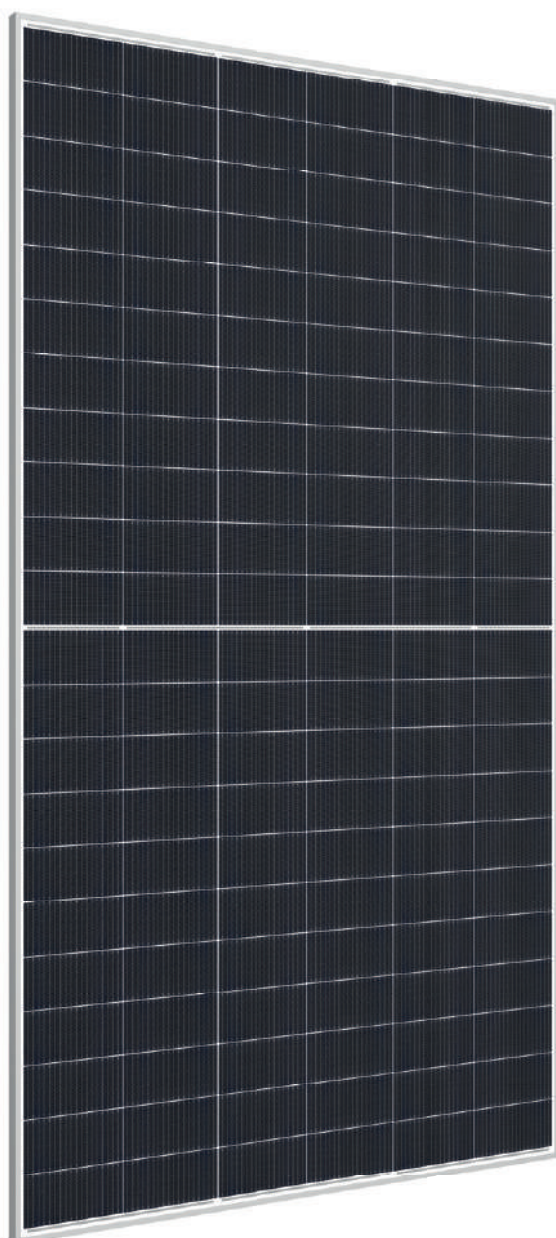
SOLAR PANEL QUALITY CONTROL POINTS



132TN12

M12 TOPCON MONOCRYSTALLINE

- ◆ CWT715-132TN12 715 Wp
- ◆ CWT710-132TN12 710 Wp
- ◆ CWT700-132TN12 700 Wp
- ◆ CWT705-132TN12 705 Wp
- ◆ CWT695-132TN12 695 Wp
- ◆ CWT690-132TN12 690 Wp
- ◆ CWT685-132TN12 685 Wp
- ◆ CWT680-132TN12 680 Wp



Half Cut



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

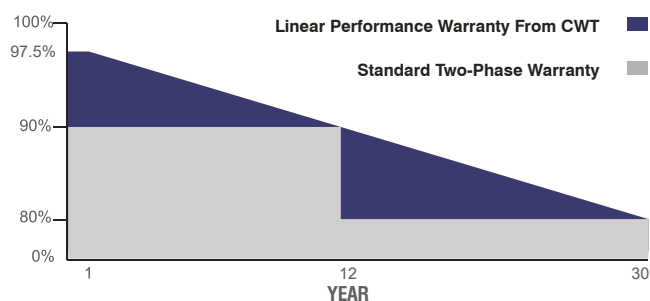
Wind load up to 2400 Pa, Snow load up to 5400 Pa



0~+5W Positive Power Tolerance



Easy Installation



30 Years Performance Warranty



12 Years Product Warranty

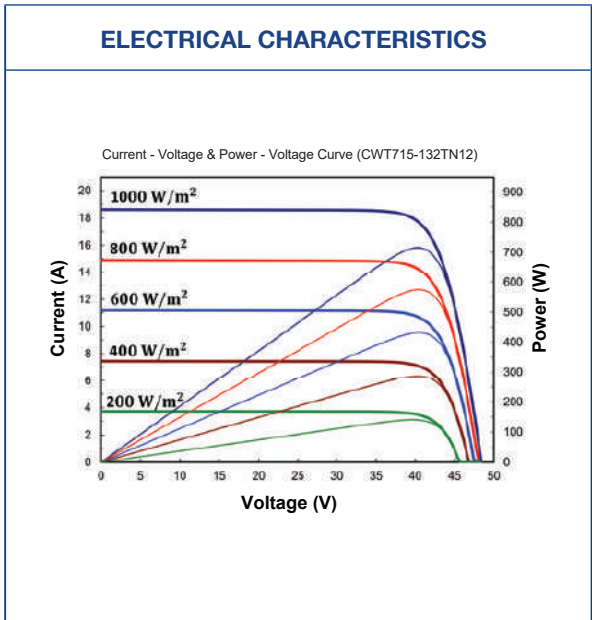
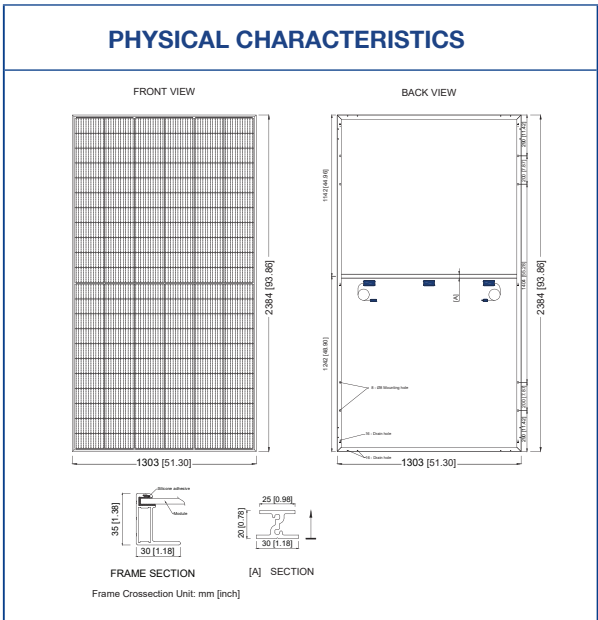
132TN12

M12 TOPCON MONOCRYSTALLINE

MODEL TYPE	CWT680 132TN12	CWT685 132TN12	CWT690 132TN12	CWT695 132TN12	CWT700 132TN12	CWT705 132TN12	CWT710 132TN12	CWT715 132TN12
Peak Power (Pmax)	680 Wp	685 Wp	690 Wp	695 Wp	700 Wp	705 Wp	710 Wp	715 Wp
Module Efficiency (%)	21.89	22.05	22.21	22.37	22.53	22.70	22.86	23.02
Maximum Power Voltage (Vmp)	38.90	39.10	39.30	39.50	39.70	39.90	40.10	40.30
Maximum Power Current (Imp)	17.49	17.52	17.56	17.60	17.64	17.67	17.71	17.75
Open Circuit Voltage (Voc)	47.00	47.20	47.40	47.60	47.80	48.00	48.20	48.40
Short Circuit Current (Isc)	18.26	18.32	18.37	18.42	18.47	18.52	18.57	18.62
Power Tolerance	0~+5W							
Maximum System Voltage	1500V DC							
Operating Temperature	-40 ~ +85°C							
Protection Class	Class II							
Maximum Series Fuse Rating	25A							
MECHANICAL SPECIFICATIONS								
Cell Dimensions(mm/inch)	210x105 / 8.27x4.14							
Cells per Module(pcs)	132 (22x6)							
Weight(kg/lbs)	34.5 / 76.06							
Panel Dimensions(mm/inch)	2384x1303x35 / 93.86x51.30x1.38							
Max. Wind/Snow Load(Pa)/(lb/ft2)	(2400 / 5400) / (50 / 212)							
Junction Box	IP68							
Junction Box Cable Length(mm/inch)	350-1600 / 13.78-63.00							
Frame Color	Silver / Black							

TEMPERATURE CHARACTERISTICS	
Temp. Coeff. of (Isc)	0.040%/°C
Temp. Coeff. of (Voc)	-0.26%/°C
Temp. Coeff. of (Pmax)	-0.31%/°C

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



132TNB12

M12 BIFACIAL TOPCON MONOCRYSTALLINE

- ◆ CWT715-132TNB12 715 Wp
- ◆ CWT710-132TNB12 710 Wp
- ◆ CWT700-132TNB12 700 Wp
- ◆ CWT705-132TNB12 705 Wp
- ◆ CWT695-132TNB12 695 Wp
- ◆ CWT690-132TNB12 690 Wp
- ◆ CWT685-132TNB12 685 Wp
- ◆ CWT680-132TNB12 680 Wp



Half Cut



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

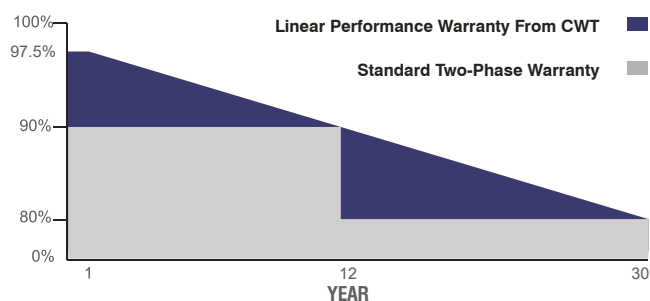
Wind load up to 2400 Pa, Snow load up to 5400 Pa



0~+5W Positive Power Tolerance



Easy Installation



30 Years Performance Warranty



12 Years Product Warranty

132TNB12

M12 BIFACIAL TOPCON MONOCRYSTALLINE

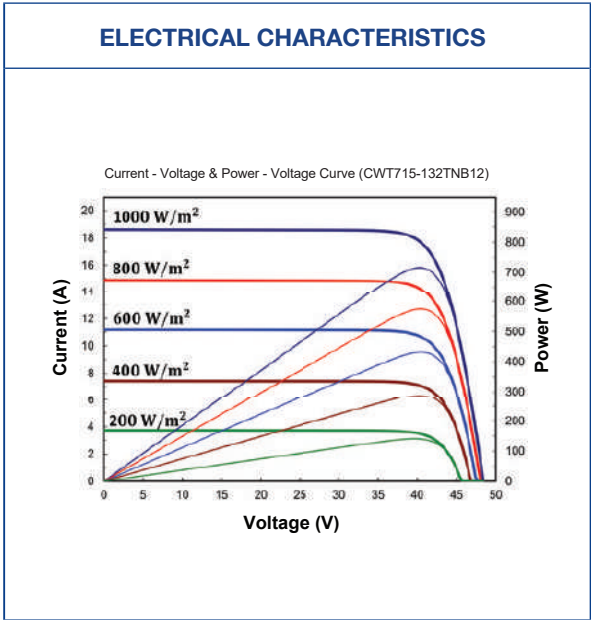
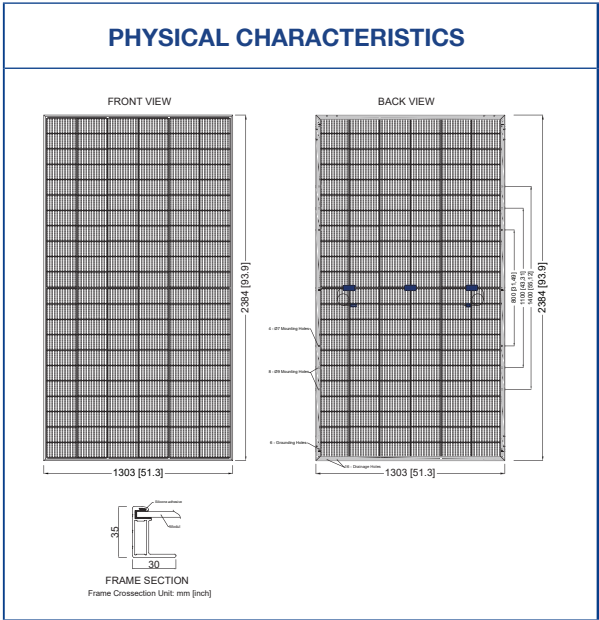
MODEL TYPE	CWT680 132TNB12	CWT685 132TNB12	CWT690 132TNB12	CWT695 132TNB12	CWT700 132TNB12	CWT705 132TNB12	CWT710 132TNB12	CWT715 132TNB12
Peak Power (Pmax)	680 Wp	685 Wp	690 Wp	695 Wp	700 Wp	705 Wp	710 Wp	715 Wp
Module Efficiency (%)	21.89	22.05	22.21	22.37	22.53	22.70	22.86	23.02
Maximum Power Voltage (Vmp)	38.90	39.10	39.30	39.50	39.70	39.90	40.10	40.30
Maximum Power Current (Imp)	17.49	17.52	17.56	17.60	17.64	17.67	17.71	17.75
Open Circuit Voltage (Voc)	47.00	47.20	47.40	47.60	47.80	48.00	48.20	48.40
Short Circuit Current (Isc)	18.26	18.32	18.37	18.42	18.47	18.52	18.57	18.62
Power Tolerance	0~+5W							
Maximum System Voltage	1500V DC							
Operating Temperature	-40 ~ +85°C							
Protection Class	Class II							
Maximum Series Fuse Rating	25A							
MECHANICAL SPECIFICATIONS								
Cell Dimensions(mm/inch)	210x105 / 8.27x4.14							
Cells per Module(pcs)	132 (22x6)							
Weight(kg/lbs)	34.5 / 76.06							
Panel Dimensions(mm/inch)	2384x1303x35 / 93.86x51.30x1.38							
Max. Wind/Snow Load(Pa)/(lb/ft2)	(2400 / 5400) / (50 / 212)							
Junction Box	IP68							
Junction Box Cable Length(mm/inch)	350-1600 / 13.78-63.00							
Frame Color	Silver / Black							
Rear Side Material	Transparent Backsheet							

REAR SIDE POWER GAIN					
Rear Power Gain	%5	10%	15%	20%	25%
Maximum Power (Pmax)	750.75	786.50	822.25	858.00	893.75
Short Circuit Current (Isc)	19.55	20.48	21.41	22.34	23.28
Open Circuit Voltage (Voc)	48.40	48.40	48.40	48.40	48.40
Maximum Power Current (Imp)	18.64	19.53	20.41	21.30	22.19
Maximum Power Voltage (Vmp)	40.30	40.30	40.30	40.30	40.30

(715W Front Power Referenced)

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

TEMPERATURE CHARACTERISTICS	
Temp. Coeff. of (Isc)	0.040%/°C
Temp. Coeff. of (Voc)	-0.26%/°C
Temp. Coeff. of (Pmax)	-0.31%/°C



132TNB12

DOUBLE GLASS

M12 BIFACIAL TOPCON MONOCRYSTALLINE

- ◆ CWT715-132TNB12 715 Wp
- ◆ CWT710-132TNB12 710 Wp
- ◆ CWT700-132TNB12 700 Wp
- ◆ CWT705-132TNB12 705 Wp
- ◆ CWT695-132TNB12 695 Wp
- ◆ CWT690-132TNB12 690 Wp
- ◆ CWT685-132TNB12 685 Wp
- ◆ CWT680-132TNB12 680 Wp



Half Cut



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



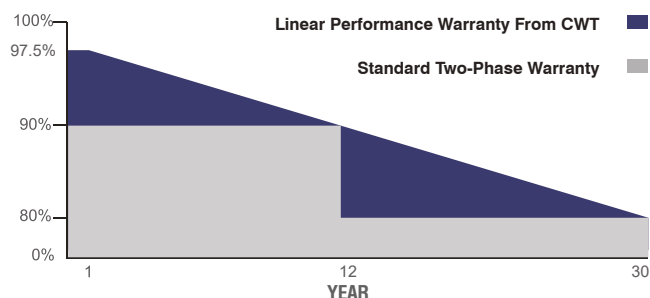
0~+5W Positive Power Tolerance



Easy Installation



Double Sided Power Generation



30 Years Performance Warranty



12 Years Product Warranty

132TNB12

DOUBLE GLASS

M12 BIFACIAL TOPCON MONOCRYSTALLINE

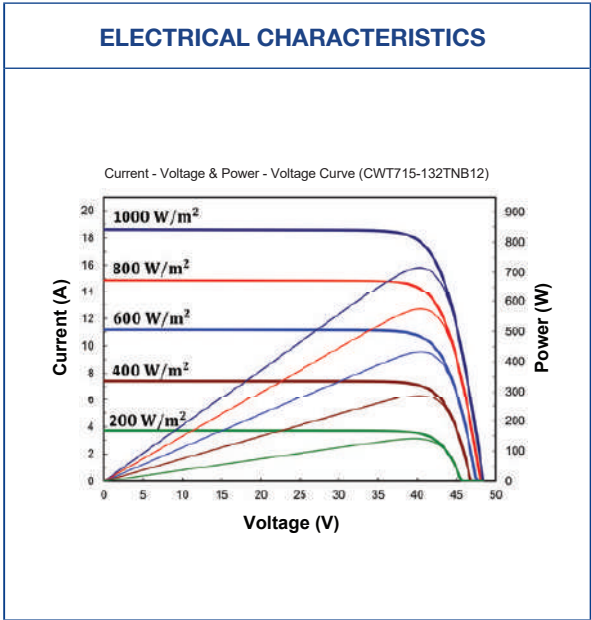
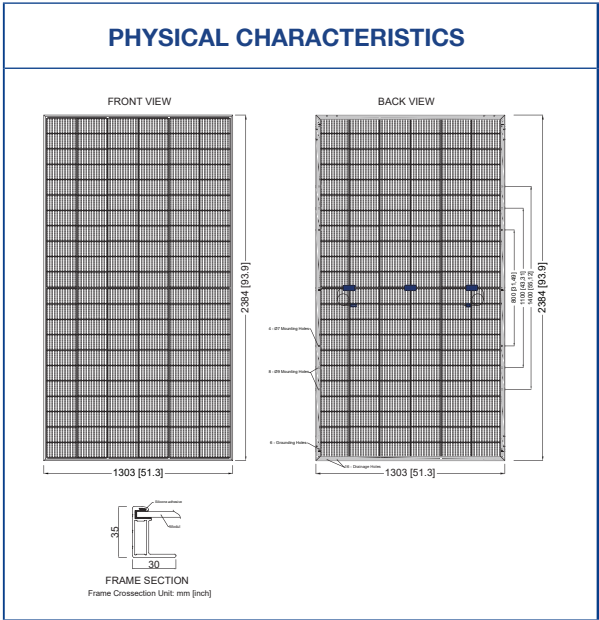
MODEL TYPE	CWT680 132TNB12	CWT685 132TNB12	CWT690 132TNB12	CWT695 132TNB12	CWT700 132TNB12	CWT705 132TNB12	CWT710 132TNB12	CWT715 132TNB12
Peak Power (Pmax)	680 Wp	685 Wp	690 Wp	695 Wp	700 Wp	705 Wp	710 Wp	715 Wp
Module Efficiency (%)	21.89	22.05	22.21	22.37	22.53	22.70	22.86	23.02
Maximum Power Voltage (Vmp)	38.90	39.10	39.30	39.50	39.70	39.90	40.10	40.30
Maximum Power Current (Imp)	17.49	17.52	17.56	17.60	17.64	17.67	17.71	17.75
Open Circuit Voltage (Voc)	47.00	47.20	47.40	47.60	47.80	48.00	48.20	48.40
Short Circuit Current (Isc)	18.26	18.32	18.37	18.42	18.47	18.52	18.57	18.62
Power Tolerance	0~+5W							
Maximum System Voltage	1500V DC							
Operating Temperature	-40 ~ +85°C							
Protection Class	Class II							
Maximum Series Fuse Rating	25A							
MECHANICAL SPECIFICATIONS								
Cell Dimensions(mm/inch)	210x105 / 8.27x4.14							
Cells per Module(pcs)	132 (22x6)							
Weight(kg/lbs)	39.5 / 87.09							
Panel Dimensions(mm/inch)	2384x1303x35 / 93.86x51.30x1.38							
Max. Wind/Snow Load(Pa)/(lb/ft2)	(2400 / 5400) / (50 / 212)							
Junction Box	IP68							
Junction Box Cable Length(mm/inch)	350-1600 / 13.78-63.00							
Glass Thickness(mm/inch)	2.0x2.0 / 0.08x0.08							
Frame Color	Silver / Black							

REARSIDE POWER GAIN					
Rear Power Gain	%5	10%	15%	20%	25%
Maximum Power (Pmax)	750.75	786.50	822.25	858.00	893.75
Short Circuit Current (Isc)	19.55	20.48	21.41	22.34	23.28
Open Circuit Voltage (Voc)	48.40	48.40	48.40	48.40	48.40
Maximum Power Current (Imp)	18.64	19.53	20.41	21.30	22.19
Maximum Power Voltage (Vmp)	40.30	40.30	40.30	40.30	40.30

(715W Front Power Referenced)

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

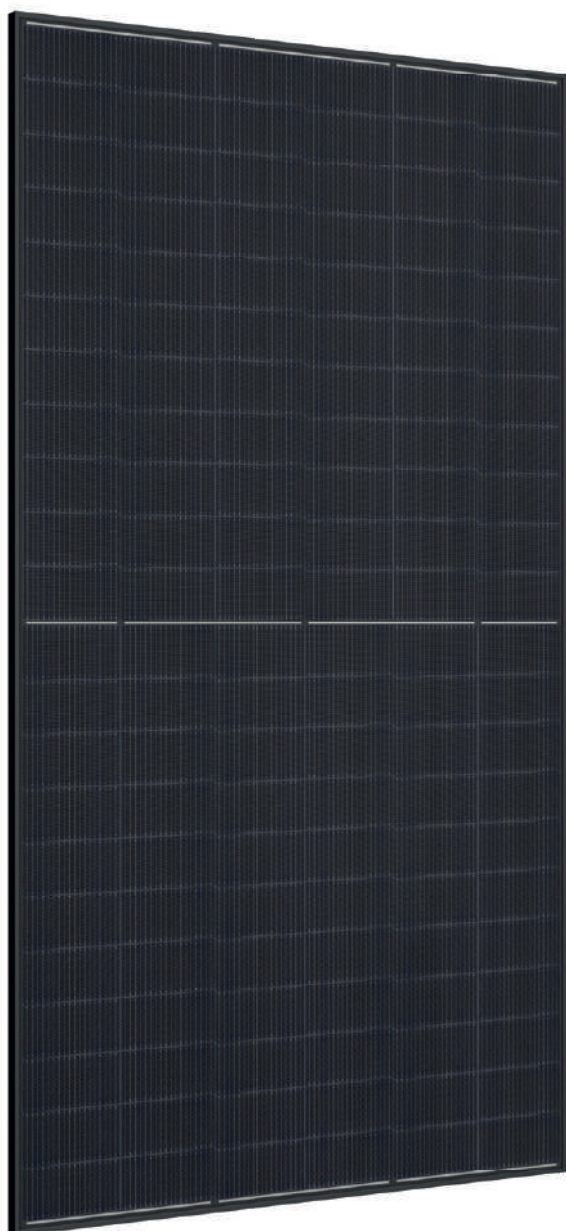
TEMPERATURE CHARACTERISTICS	
Temp. Coeff. of (Isc)	0.040%/°C
Temp. Coeff. of (Voc)	-0.26%/°C
Temp. Coeff. of (Pmax)	-0.31%/°C



132TNFB12

M12 BLACK SERIES TOPCON MONOCRYSTALLINE

- ◆ CWT715-132TNFB12 715 Wp
- ◆ CWT710-132TNFB12 710 Wp
- ◆ CWT700-132TNFB12 700 Wp
- ◆ CWT705-132TNFB12 705 Wp
- ◆ CWT695-132TNFB12 695 Wp
- ◆ CWT690-132TNFB12 690 Wp
- ◆ CWT685-132TNFB12 685 Wp
- ◆ CWT680-132TNFB12 680 Wp



Half Cut



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

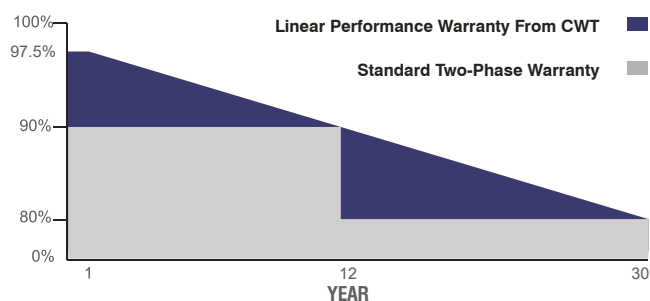
Wind load up to 2400 Pa, Snow load up to 5400 Pa



0~+5W Positive Power Tolerance



Easy Installation



30 Years Performance Warranty



12 Years Product Warranty

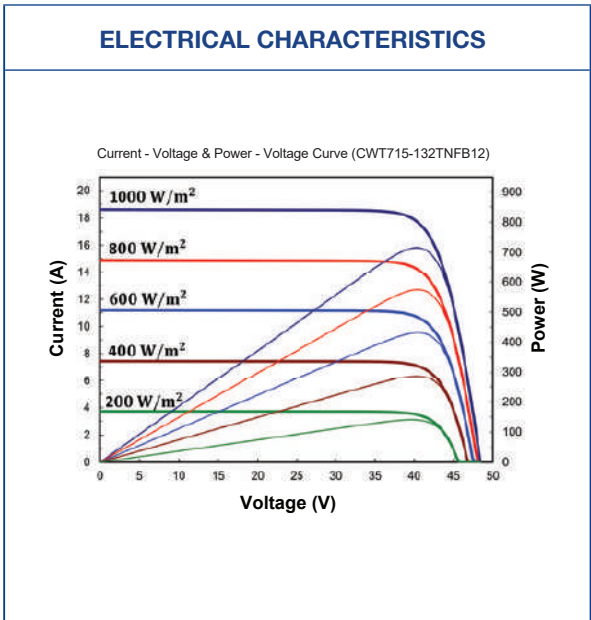
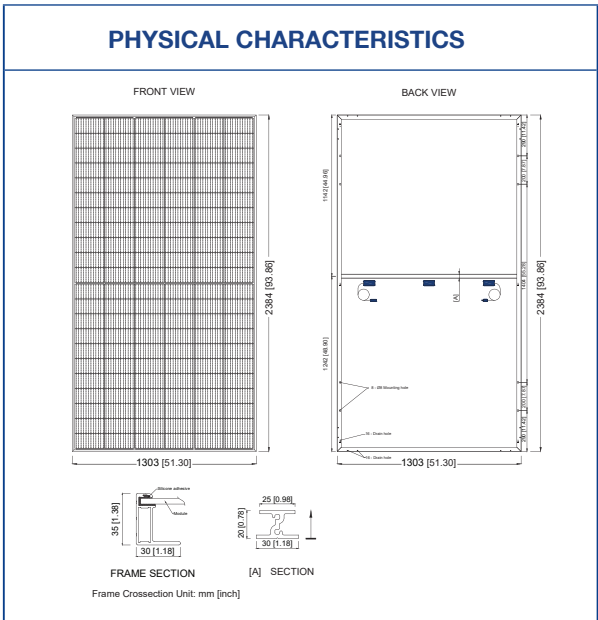
132TNFB12

M12 BLACK SERIES TOPCON MONOCRYSTALLINE

MODEL TYPE	CWT680 132TNFB12	CWT685 132TNFB12	CWT690 132TNFB12	CWT695 132TNFB12	CWT700 132TNFB12	CWT705 132TNFB12	CWT710 132TNFB12	CWT715 132TNFB12
Peak Power (Pmax)	680 Wp	685 Wp	690 Wp	695 Wp	700 Wp	705 Wp	710 Wp	715 Wp
Module Efficiency (%)	21.89	22.05	22.21	22.37	22.53	22.70	22.86	23.02
Maximum Power Voltage (Vmp)	38.90	39.10	39.30	39.50	39.70	39.90	40.10	40.30
Maximum Power Current (Imp)	17.49	17.52	17.56	17.60	17.64	17.67	17.71	17.75
Open Circuit Voltage (Voc)	47.00	47.20	47.40	47.60	47.80	48.00	48.20	48.40
Short Circuit Current (Isc)	18.26	18.32	18.37	18.42	18.47	18.52	18.57	18.62
Power Tolerance	0~+5W							
Maximum System Voltage	1500V DC							
Operating Temperature	-40 ~ +85°C							
Protection Class	Class II							
Maximum Series Fuse Rating	25A							
MECHANICAL SPECIFICATIONS								
Cell Dimensions(mm/inch)	210x105 / 8.27x4.14							
Cells per Module(pcs)	132 (22x6)							
Weight(kg/lbs)	34.5 / 76.06							
Panel Dimensions(mm/inch)	2384x1303x35 / 93.86x51.30x1.38							
Max. Wind/Snow Load(Pa)/(lb/ft2)	(2400 / 5400) / (50 / 212)							
Junction Box	IP68							
Junction Box Cable Length(mm/inch)	350-1600 / 13.78-63.00							
Frame Color	Black							

TEMPERATURE CHARACTERISTICS	
Temp. Coeff. of (Isc)	0.040%/°C
Temp. Coeff. of (Voc)	-0.26%/°C
Temp. Coeff. of (Pmax)	-0.31%/°C

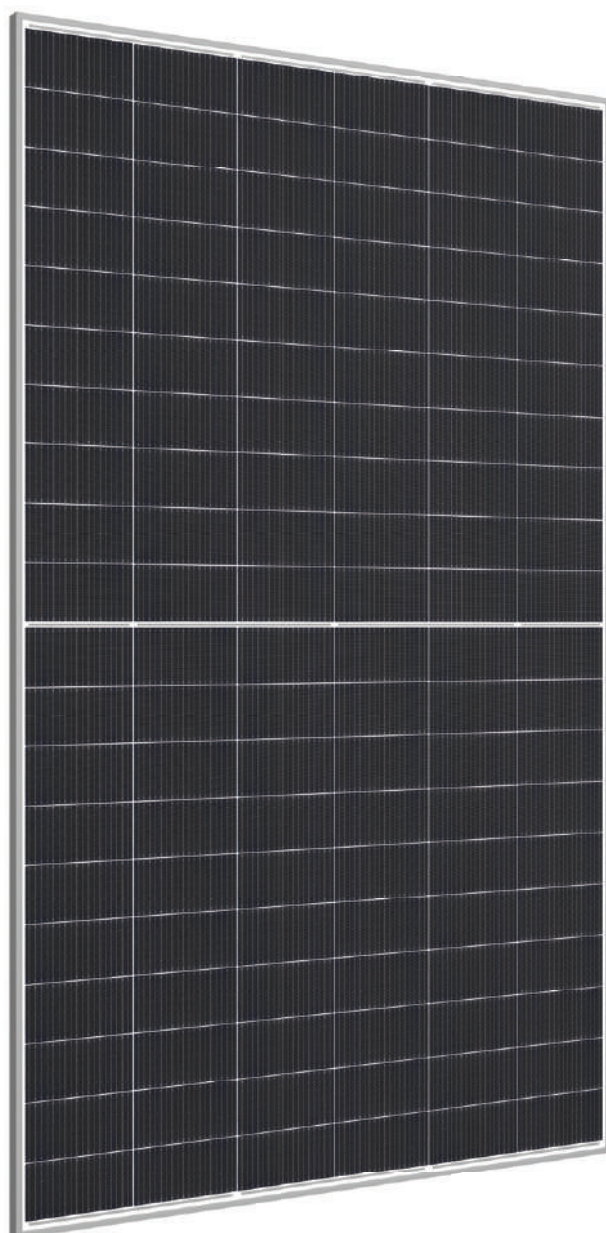
PACKING CONFIGURATION	
Container	40' GP
Pieces per Pallet	31
Pieces Per Container	527
Pallet Per Container	17



120TN12

M12 TOPCON MONOCRYSTALLINE

- ◆ CWT645-120TN12 645 Wp
- ◆ CWT640-120TN12 640 Wp
- ◆ CWT635-120TN12 635 Wp
- ◆ CWT630-120TN12 630 Wp
- ◆ CWT625-120TN12 625 Wp
- ◆ CWT620-120TN12 620 Wp
- ◆ CWT615-120TN12 615 Wp



Half Cut



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

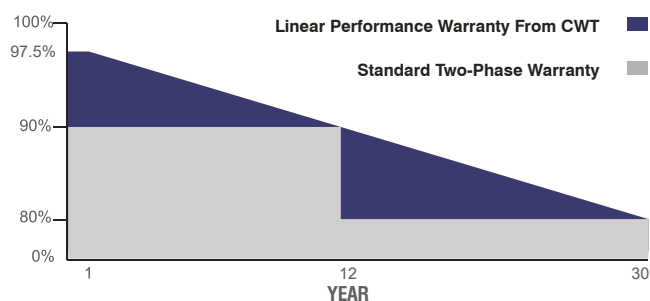
Wind load up to 2400 Pa, Snow load up to 5400 Pa



0~+5W Positive Power Tolerance



Easy Installation



30 Years Performance Warranty



12 Years Product Warranty

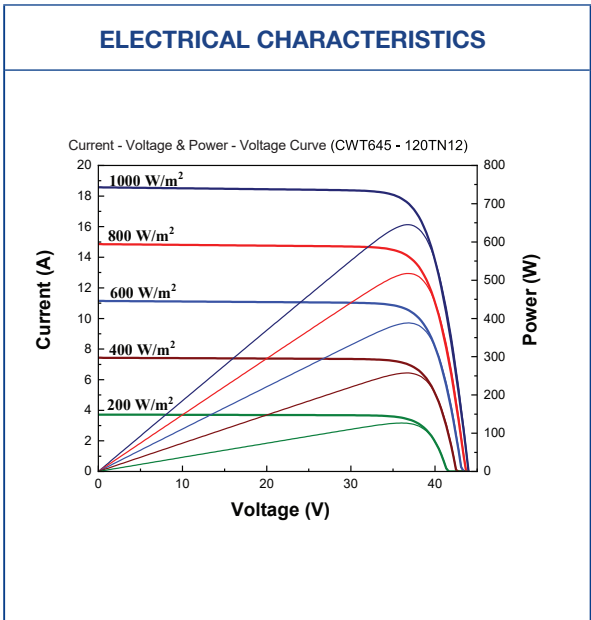
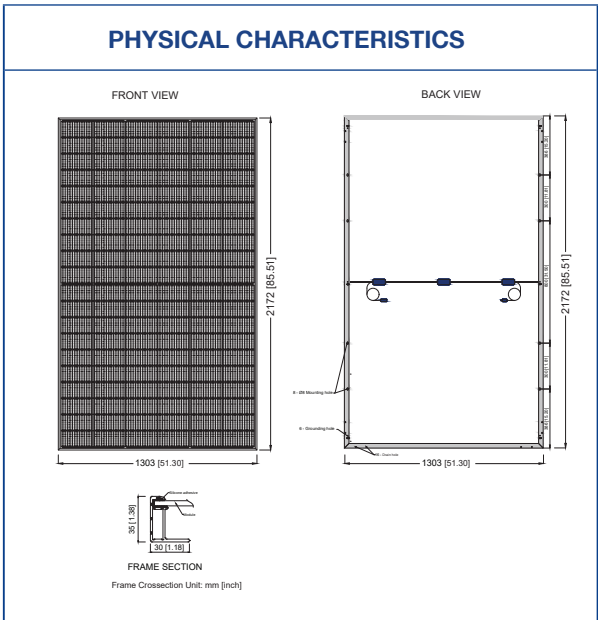
120TN12

M12 TOPCON MONOCRYSTALLINE

MODEL TYPE	CWT615 120TN12	CWT620 120TN12	CWT625 120TN12	CWT630 120TN12	CWT635 120TN12	CWT640 120TN12	CWT645 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						
Protection Class	Class II						
Maximum Series Fuse Rating	25A						
MECHANICAL SPECIFICATIONS							
Cell Dimensions(mm/inch)	210x105 / 8.27x4.14						
Cells per Module(pcs)	120 (6x20)						
Weight(kg/lbs)	31.0 / 68.35						
Panel Dimensions(mm/inch)	2172x1303x35 / 85.51x51.30x1.37						
Max. Wind/Snow Load(Pa)/(lb/ft2)	(2400 / 5400) / (50 / 212)						
Junction Box	IP68						
Junction Box Cable Length(mm/inch)	350-1600 / 13.78-63.00						
Frame Color	Silver / Black						

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

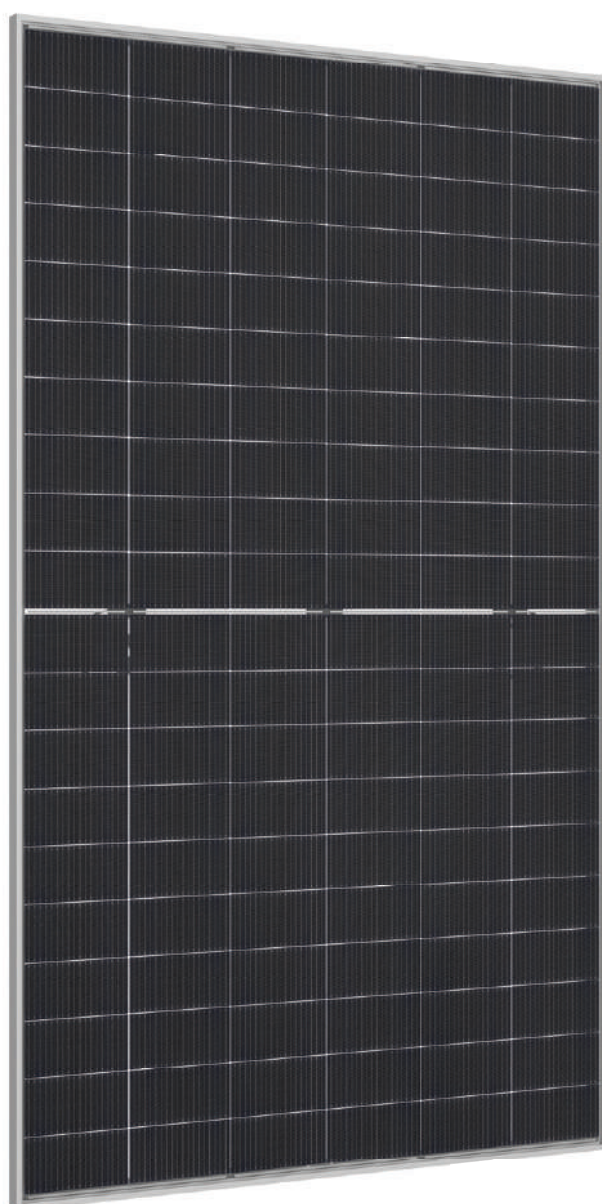
PACKING CONFIGURATION	
Container	40' GP
Pieces per Pallet	31
Pieces Per Container	527
Pallet Per Container	17



120TNB12

M12 BIFACIAL TOPCON MONOCRYSTALLINE

- ◆ CWT645-120TNB12 645 Wp
- ◆ CWT640-120TNB12 640 Wp
- ◆ CWT635-120TNB12 635 Wp
- ◆ CWT630-120TNB12 630 Wp
- ◆ CWT625-120TNB12 625 Wp
- ◆ CWT620-120TNB12 620 Wp
- ◆ CWT615-120TNB12 615 Wp



Half Cut



High Conversion Efficiency

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Outstanding Low Irradiation Glass

Outstanding panel performance even in weak light conditions



Excellent Durability

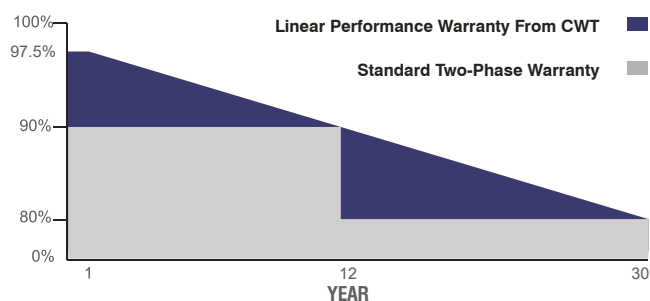
Wind load up to 2400 Pa, Snow load up to 5400 Pa



0~+5W Positive Power Tolerance



Easy Installation



30 Years Performance Warranty



12 Years Product Warranty

120TNB12

M12 BIFACIAL TOPCON MONOCRYSTALLINE

MODEL TYPE	CWT615 120TNB12	CWT620 120TNB12	CWT625 120TNB12	CWT630 120TNB12	CWT635 120TNB12	CWT640 120TNB12	CWT645 120TNB12
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						
Protection Class	Class II						
Maximum Series Fuse Rating	25A						
MECHANICAL SPECIFICATIONS							
Cell Dimensions(mm/inch)	210x105 / 8.27x4.14						
Cells per Module(pcs)	120 (6x20)						
Weight(kg/lbs)	31.0 / 68.35						
Panel Dimensions(mm/inch)	2172x1303x35 / 85.51x51.30x1.37						
Max. Wind/Snow Load(Pa)/(lb/ft2)	(2400 / 5400) / (50 / 212)						
Junction Box	IP68						
Junction Box Cable Length(mm/inch)	350-1600 / 13.78-63.00						
Frame Color	Silver / Black						
Rear Side Material	Transparent Backsheet						

REAR SIDE POWER GAIN

Rear Power Gain	5%	10%	15%	20%	25%
Maximum Power (Pmax)	677.25	709.50	741.75	774.00	806.25
Short Circuit Current (Isc)	19.48	20.38	21.28	22.19	23.10
Open Circuit Voltage (Voc)	44.05	44.12	44.19	44.26	44.33
Maximum Power Current (Imp)	18.42	19.28	20.14	21.02	21.88
Maximum Power Voltage (Vmp)	36.77	36.80	36.83	36.85	36.87

(645W Front Power Referenced)

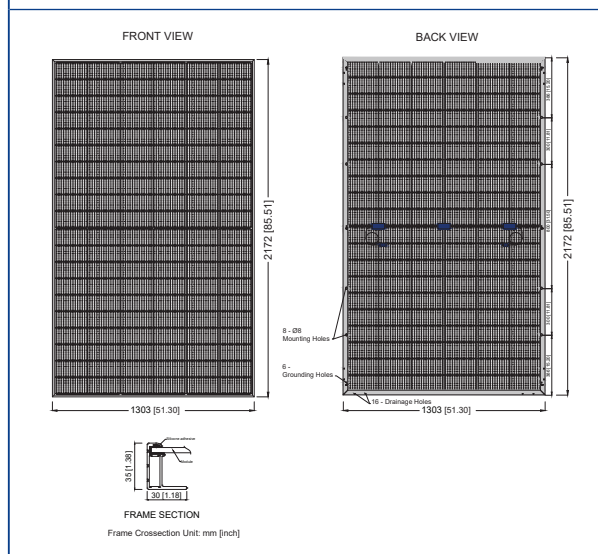
PACKING CONFIGURATION

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

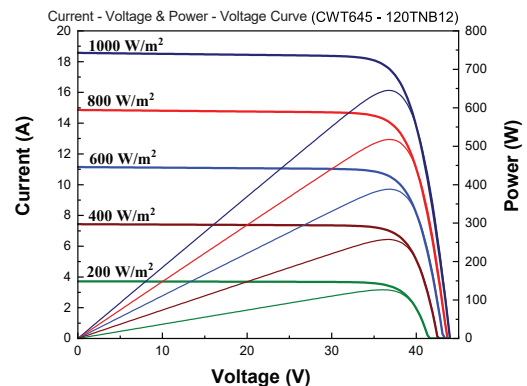
TEMPERATURE CHARACTERISTICS

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

PHYSICAL CHARACTERISTICS



ELECTRICAL CHARACTERISTICS

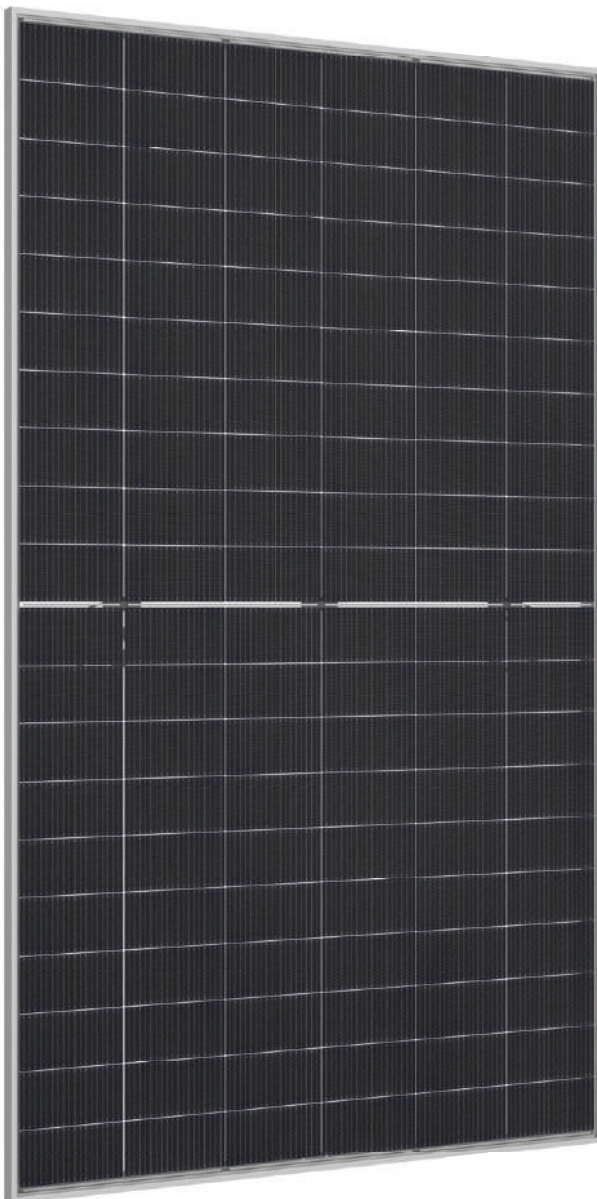


120TNB12

DOUBLE GLASS

M12 BIFACIAL TOPCON MONOCRYSTALLINE

- ◆ CWT645-120TNB12 645 Wp
- ◆ CWT640-120TNB12 640 Wp
- ◆ CWT635-120TNB12 635 Wp
- ◆ CWT630-120TNB12 630 Wp
- ◆ CWT625-120TNB12 625 Wp
- ◆ CWT620-120TNB12 620 Wp
- ◆ CWT615-120TNB12 615 Wp



Half Cut



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



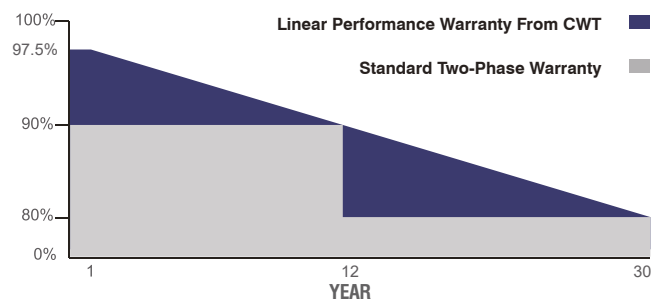
0~+5W Positive Power Tolerance



Easy Installation



Double Sided Power Generation



30 Years Performance Warranty



12 Years Product Warranty

120TNB12

DOUBLE GLASS

M12 BIFACIAL TOPCON MONOCRYSTALLINE

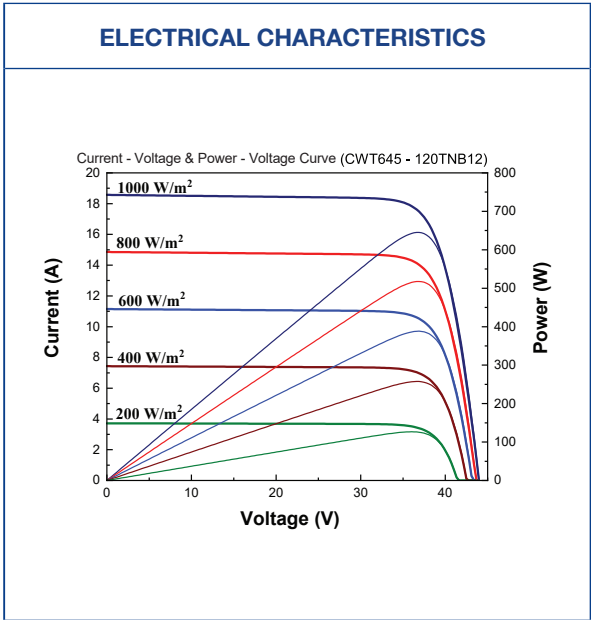
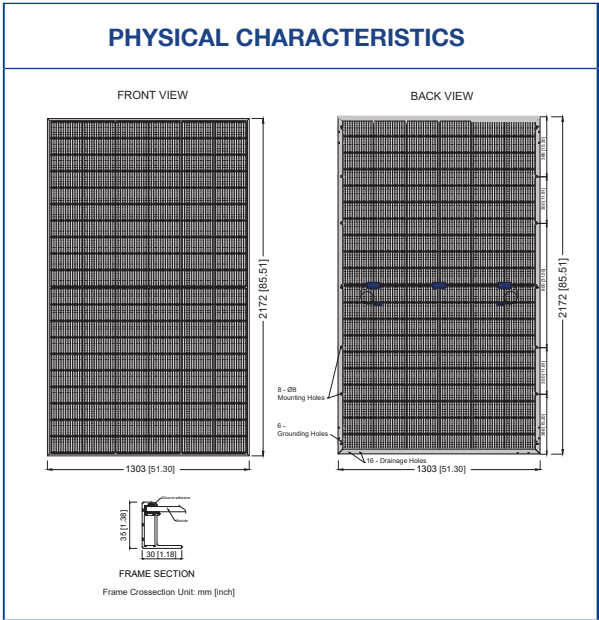
MODEL TYPE	CWT615 120TNB12	CWT620 120TNB12	CWT625 120TNB12	CWT630 120TNB12	CWT635 120TNB12	CWT640 120TNB12	CWT645 120TNB12
Peak Power (Pmax)	615 Wp	620 Wp	625 Wp	630 Wp	635 Wp	640 Wp	645 Wp
Module Efficiency (%)	21.73	21.95	22.08	22.26	22.44	22.65	22.79
Maximum Power Voltage (Vmp)	35.56	35.76	35.96	36.16	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						
Protection Class	Class II						
Maximum Series Fuse Rating	25A						
MECHANICAL SPECIFICATIONS							
Cell Dimensions(mm/inch)	210x105 / 8.27x4.14						
Cells per Module(pcs)	120 (6x20)						
Weight(kg/lbs)	35.36 / 77.95						
Panel Dimensions(mm/inch)	2172x1303x35 / 85.51x51.30x1.37						
Max. Wind/Snow Load(Pa)/(lb/ft2)	(2400 / 5400) / (50 / 212)						
Junction Box	IP68						
Junction Box Cable Length(mm/inch)	350-1600 / 13.78-63.00						
Glass Thickness(mm/inch)	2.0x2.0 / 0.08x0.08						
Frame Color	Silver / Black						

REARSIDE POWER GAIN					
Rear Power Gain	5%	10%	15%	20%	25%
Maximum Power (Pmax)	677.25	709.50	741.75	774.00	806.25
Short Circuit Current (Isc)	19.48	20.38	21.28	22.19	23.10
Open Circuit Voltage (Voc)	44.05	44.12	44.19	44.26	44.33
Maximum Power Current (Imp)	18.42	19.28	20.14	21.02	21.88
Maximum Power Voltage (Vmp)	36.77	36.80	36.83	36.85	36.87

(645W Front Power Referenced)

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

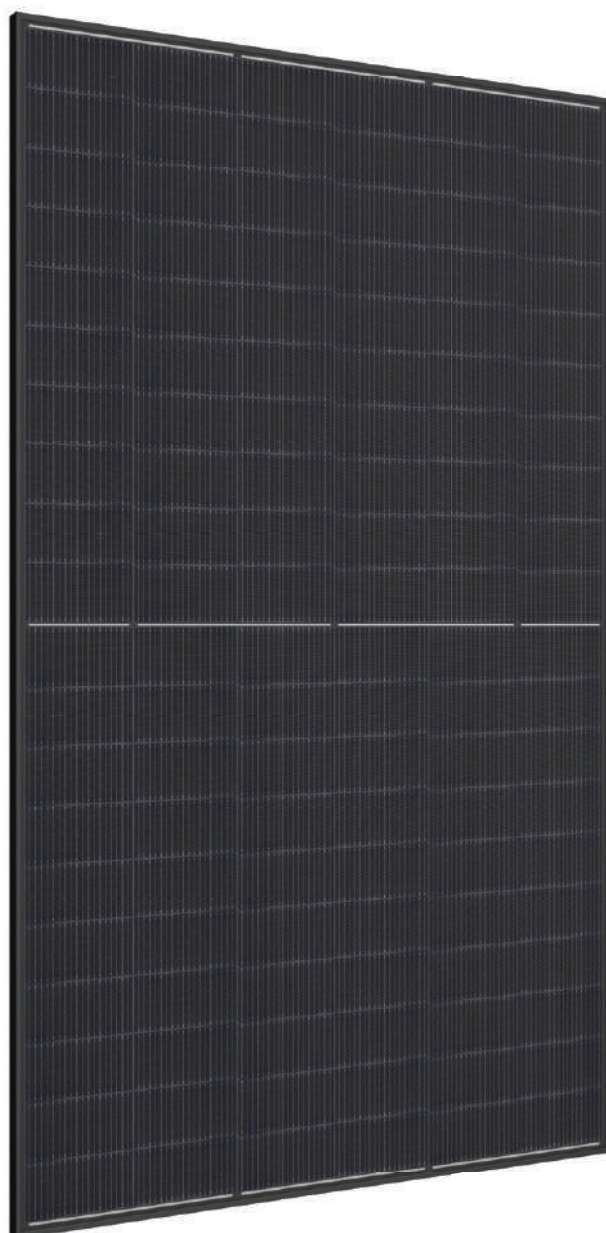
TEMPERATURE CHARACTERISTICS	
Temp. Coeff. of (Isc)	0.040%/°C
Temp. Coeff. of (Voc)	-0.260%/°C
Temp. Coeff. of (Pmax)	-0.320%/°C



120TNFB12

M12 BLACK SERIES TOPCON MONOCRYSTALLINE

- ◆ CWT645-120TNFB12 645 Wp
- ◆ CWT640-120TNFB12 640 Wp
- ◆ CWT635-120TNFB12 635 Wp
- ◆ CWT630-120TNFB12 630 Wp
- ◆ CWT625-120TNFB12 625 Wp
- ◆ CWT620-120TNFB12 620 Wp
- ◆ CWT615-120TNFB12 615 Wp



Half Cut



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

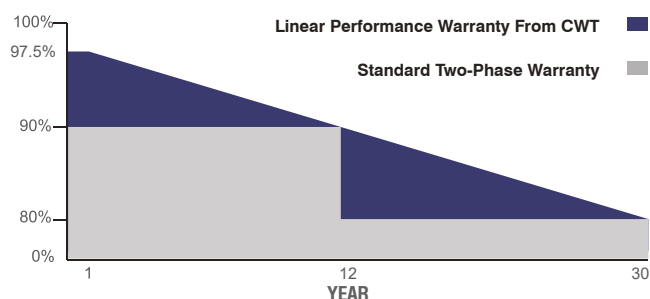
Wind load up to 2400 Pa, Snow load up to 5400 Pa



0~+5W Positive Power Tolerance



Easy Installation



30 Years Performance Warranty



12 Years Product Warranty

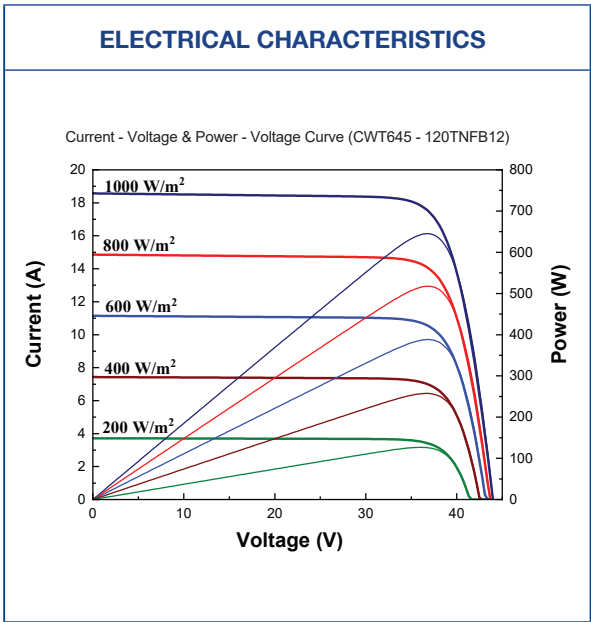
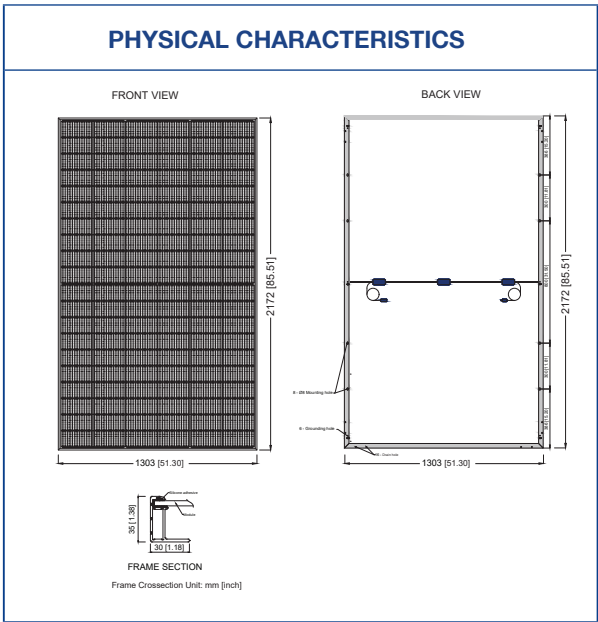
120TNFB12

M12 BLACK SERIES TOPCON MONOCRYSTALLINE

MODEL TYPE	CWT615 120TNFB12	CWT620 120TNFB12	CWT625 120TNFB12	CWT630 120TNFB12	CWT635 120TNFB12	CWT640 120TNFB12	CWT645 120TNFB12
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						
Protection Class	Class II						
Maximum Series Fuse Rating	25A						
MECHANICAL SPECIFICATIONS							
Cell Dimensions(mm/inch)	210x105 / 8.27x4.14						
Cells per Module(pcs)	120 (6x20)						
Weight(kg/lbs)	31.0 / 68.35						
Panel Dimensions(mm/inch)	2172x1303x35 / 85.51x51.30x1.37						
Max. Wind/Snow Load(Pa)/(lb/ft2)	(2400 / 5400) / (50 / 212)						
Junction Box	IP68						
Junction Box Cable Length(mm/inch)	350-1600 / 13.78-63.00						
Frame Color	Black						

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

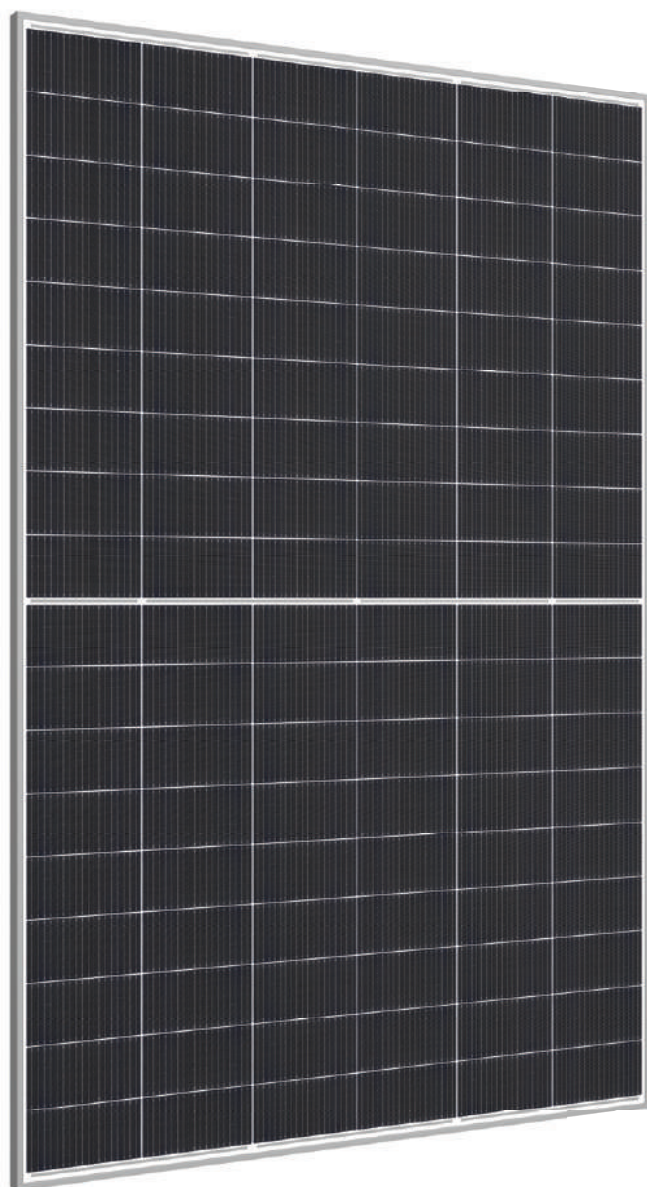
PACKING CONFIGURATION	
Container	40' GP
Pieces per Pallet	31
Pieces Per Container	527
Pallet Per Container	17



108TN12

M12 TOPCON MONOCRYSTALLINE

- ◆ CWT575-108TN12 575 Wp
- ◆ CWT570-108TN12 570 Wp
- ◆ CWT565-108TN12 565 Wp
- ◆ CWT560-108TN12 560 Wp
- ◆ CWT555-108TN12 555 Wp



Half Cut



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

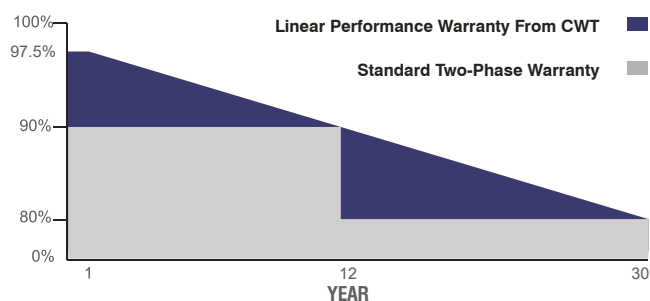
Wind load up to 2400 Pa, Snow load up to 5400 Pa



0~+5W Positive Power Tolerance



Easy Installation



30 Years Performance Warranty



12 Years Product Warranty

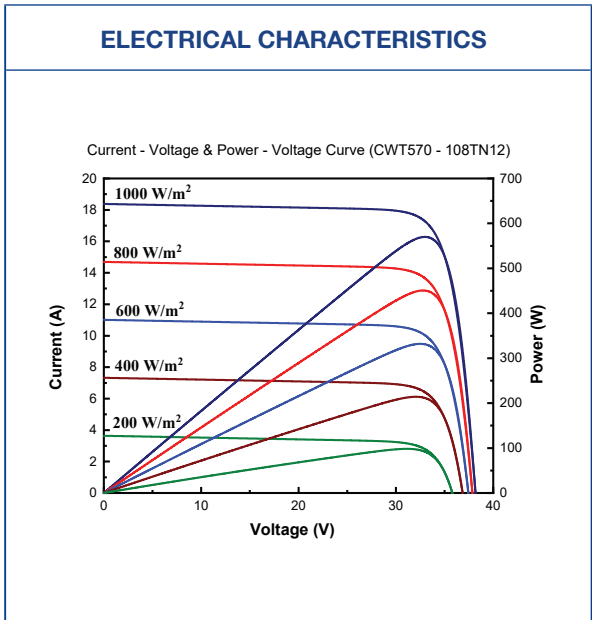
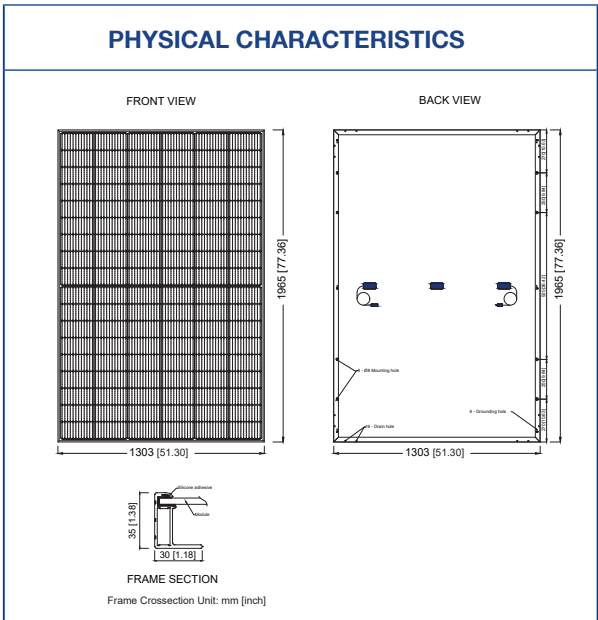
108TN12

M12 TOPCON MONOCRYSTALLINE

MODEL TYPE	CWT555 108TN12	CWT560 108TN12	CWT565 108TN12	CWT570 108TN12	CWT575 108TN12
Peak Power (Pmax)	555 Wp	560 Wp	565 Wp	570 Wp	575 Wp
Module Efficiency (%)	21.68	21.87	22.07	22.26	22.46
Maximum Power Voltage (Vmp)	32.40	32.60	32.80	33.00	33.20
Maximum Power Current (Imp)	17.13	17.18	17.23	17.28	17.32
Open Circuit Voltage (Voc)	37.60	37.80	38.00	38.20	38.40
Short Circuit Current (Isc)	18.22	18.27	18.33	18.38	18.42
Power Tolerance	0~+5W				
Maximum System Voltage	1500V DC				
Operating Temperature	-40 ~ +85°C				
Protection Class	Class II				
Maximum Series Fuse Rating	25A				
MECHANICAL SPECIFICATIONS					
Cell Dimensions(mm/inch)	210x105 / 8.37x4.14				
Cells per Module(pcs)	108 (6x18)				
Weight(kg/lbs)	28.5 / 62.83				
Panel Dimensions(mm/inch)	1965x1303x35 / 77.37x51.30x1.38				
Max. Wind/Snow Load(Pa)/(lb/ft2)	(2400 / 5400) / (50 / 212)				
Junction Box	IP68				
Junction Box Cable Length(mm/inch)	350-1600 / 13.78-63.00				
Frame Color	Silver / Black				

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

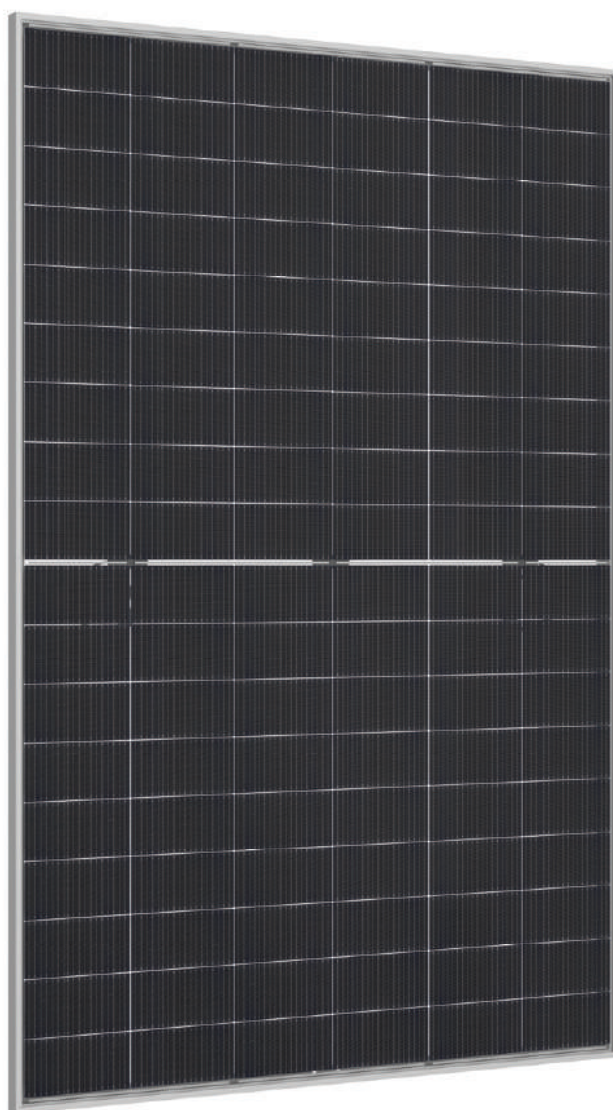
PACKING CONFIGURATION	
Container	40' GP
Pieces per Pallet	30
Pieces Per Container	480
Pallet Per Container	16



108TNB12

M12 BIFACIAL TOPCON MONOCRYSTALLINE

- ◆ CWT575-108TNB12 575 Wp
- ◆ CWT570-108TNB12 570 Wp
- ◆ CWT565-108TNB12 565 Wp
- ◆ CWT560-108TNB12 560 Wp
- ◆ CWT555-108TNB12 555 Wp



Half Cut



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

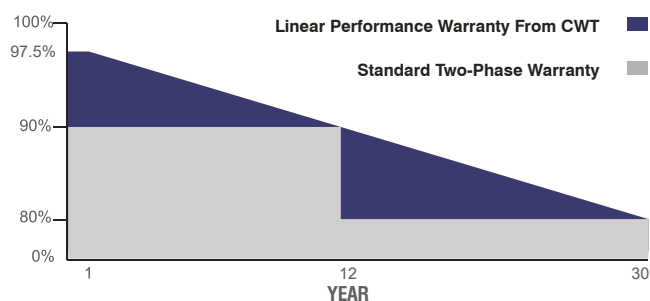
Wind load up to 2400 Pa, Snow load up to 5400 Pa



0~+5W Positive Power Tolerance



Easy Installation



30 Years Performance Warranty



12 Years Product Warranty

108TNB12

M12 BIFACIAL TOPCON MONOCRYSTALLINE

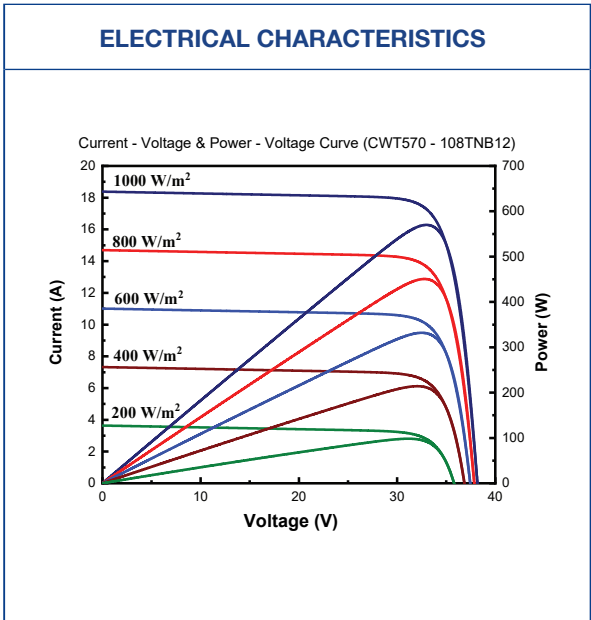
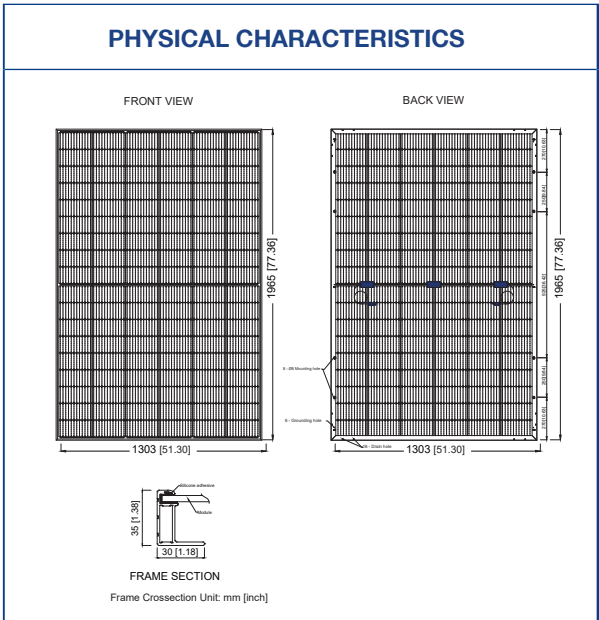
MODEL TYPE	CWT555 108TNB12	CWT560 108TNB12	CWT565 108TNB12	CWT570 108TNB12	CWT575 108TNB12
Peak Power (Pmax)	555 Wp	560 Wp	565 Wp	570 Wp	575 Wp
Module Efficiency (%)	21.68	21.87	22.07	22.26	22.46
Maximum Power Voltage (Vmp)	32.40	32.60	32.80	33.00	33.20
Maximum Power Current (Imp)	17.13	17.18	17.23	17.28	17.32
Open Circuit Voltage (Voc)	37.60	37.80	38.00	38.20	38.40
Short Circuit Current (Isc)	18.22	18.27	18.33	18.38	18.42
Power Tolerance	0~+5W				
Maximum System Voltage	1500V DC				
Operating Temperature	-40 ~ +85°C				
Protection Class	Class II				
Maximum Series Fuse Rating	25A				
MECHANICAL SPECIFICATIONS					
Cell Dimensions(mm/inch)	210x105 / 8.37x4.14				
Cells per Module(pcs)	108 (6x18)				
Weight(kg/lbs)	28.5 / 62.83				
Panel Dimensions(mm/inch)	1965x1303x35 / 77.37x51.30x1.38				
Max. Wind/Snow Load(Pa)/(lb/ft2)	(2400 / 5400) / (50 / 212)				
Junction Box	IP68				
Junction Box Cable Length(mm/inch)	350-1600 / 13.78-63.00				
Frame Color	Silver / Black				
Rear Side Material	Transparent Backsheet				

REAR SIDE POWER GAIN					
Rear Power Gain	5%	10%	15%	20%	25%
Maximum Power (Pmax)	598.50	627.00	655.50	684.00	712.50
Short Circuit Current (Isc)	19.24	20.12	21.00	21.87	22.74
Open Circuit Voltage (Voc)	38.26	38.33	38.39	38.45	38.51
Maximum Power Current (Imp)	18.11	18.95	19.78	20.62	21.46
Maximum Power Voltage (Vmp)	33.04	33.09	33.13	33.17	33.20

(570W Front Power Referenced)

PACKING CONFIGURATION	
Container	40' GP
Pieces per Pallet	30
Pieces Per Container	480
Pallet Per Container	16

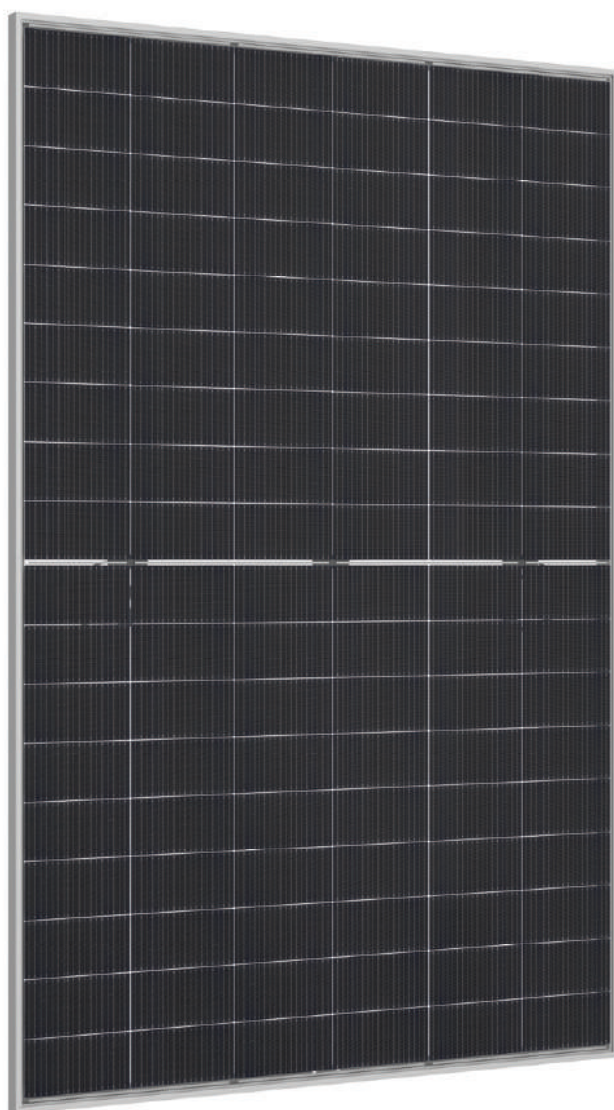
TEMPERATURE CHARACTERISTICS	
Temp. Coeff. of (Isc)	0.040%/°C
Temp. Coeff. of (Voc)	-0.260%/°C
Temp. Coeff. of (Pmax)	-0.320%/°C



108TNB12 DOUBLE GLASS

M12 BIFACIAL TOPCON MONOCRYSTALLINE

- ◆ CWT575-108TNB12 575 Wp
- ◆ CWT570-108TNB12 570 Wp
- ◆ CWT565-108TNB12 565 Wp
- ◆ CWT560-108TNB12 560 Wp
- ◆ CWT555-108TNB12 555 Wp



Half Cut



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



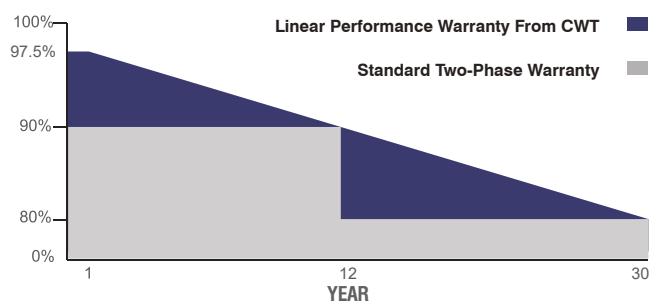
0~+5W Positive Power Tolerance



Easy Installation



Double Sided Power Generation



30 Years Performance Warranty



12 Years Product Warranty

108TNB12

DOUBLE GLASS

M12 BIFACIAL TOPCON MONOCRYSTALLINE

MODEL TYPE	CWT555 108TNB12	CWT560 108TNB12	CWT565 108TNB12	CWT570 108TNB12	CWT575 108TNB12
Peak Power (Pmax)	555 Wp	560 Wp	565 Wp	570 Wp	575 Wp
Module Efficiency (%)	21.68	21.87	22.07	22.26	22.46
Maximum Power Voltage (Vmp)	32.40	32.60	32.80	33.00	33.20
Maximum Power Current (Imp)	17.13	17.18	17.23	17.28	17.32
Open Circuit Voltage (Voc)	37.60	37.80	38.00	38.20	38.40
Short Circuit Current (Isc)	18.22	18.27	18.33	18.38	18.42
Power Tolerance	0~+5W				
Maximum System Voltage	1500V DC				
Operating Temperature	-40 ~ +85°C				
Protection Class	Class II				
Maximum Series Fuse Rating	25A				
MECHANICAL SPECIFICATIONS					
Cell Dimensions(mm/inch)	210x105 / 8.37x4.14				
Cells per Module(pcs)	108 (6x18)				
Weight(kg/lbs)	32.5 / 71.66				
Panel Dimensions(mm/inch)	1965x1303x35 / 77.37x51.30x1.38				
Max. Wind/Snow Load(Pa)/(lb/ft2)	(2400 / 5400) / (50 / 212)				
Junction Box	IP68				
Junction Box Cable Length(mm/inch)	350-1600 / 13.78-63.00				
Glass Thickness(mm/inch)	2.0x2.0 / 0.08x0.08				
Frame Color	Silver / Black				

REARSIDE POWER GAIN

Rear Power Gain	5%	10%	15%	20%	25%
Maximum Power (Pmax)	598.50	627.00	655.50	684.00	712.50
Short Circuit Current (Isc)	19.24	20.12	21.00	21.87	22.74
Open Circuit Voltage (Voc)	38.26	38.33	38.39	38.45	38.51
Maximum Power Current (Imp)	18.11	18.95	19.78	20.62	21.46
Maximum Power Voltage (Vmp)	33.04	33.09	33.13	33.17	33.20

(570W Front Power Referenced)

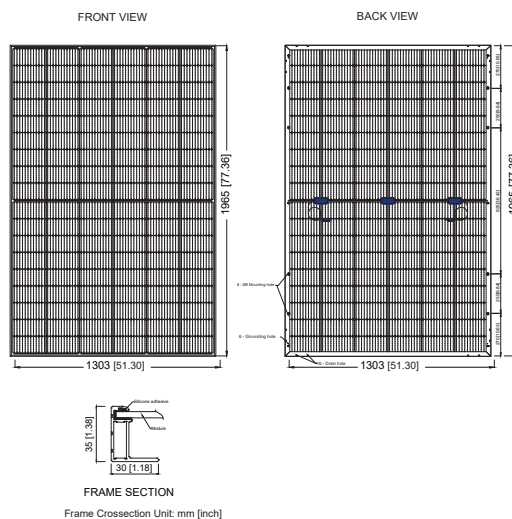
PACKING CONFIGURATION

Container	40' GP
Pieces per Pallet	30
Pieces Per Container	480
Pallet Per Container	16

TEMPERATURE CHARACTERISTICS

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

PHYSICAL CHARACTERISTICS



ELECTRICAL CHARACTERISTICS

