ATTACHMENT C: PROJECT TYPICALS

www.jinkosolar.com

Solar JinKO
Building Your Trust in Solar

Tiger Pro 72HC-BDVP

525-545 Watt

BIFACIAL MODULE WITH DUAL GLASS

P-Type

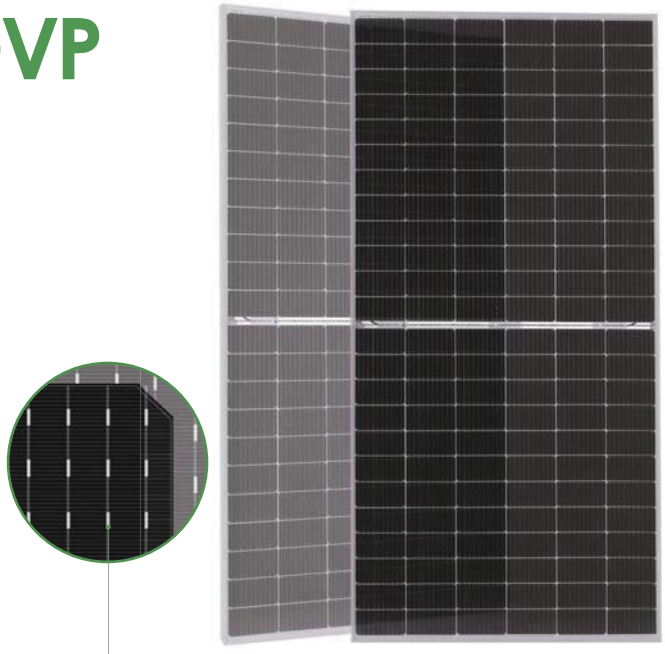
Positive power tolerance of 0~+3%

IEC61215(2005), IEC61730(2004)

ISO9001:2015: Quality Management System

ISO14001:2015: Environment Management System

ISO45001:2018
Occupational health and safety management systems



Bifacial Technology

Key Features

Multi Busbar Technology

Better light trapping and current collection to improve module power output and reliability.

Longer Life-time Power Yield

0.45% annual power degradation and 30 year linear power warranty.

PID Resistance

Excellent Anti-PID performance guarantee via optimized mass-production process and materials control.

Enhanced Mechanical Load

2400 Pa
5400 Pa

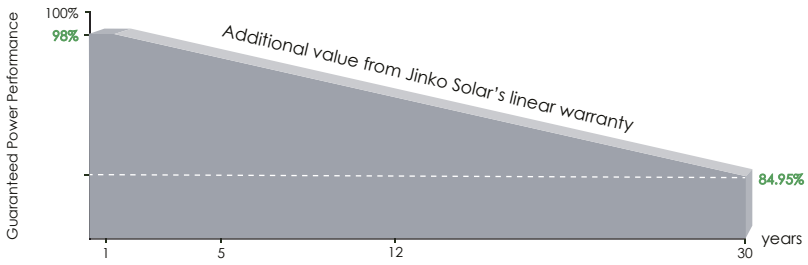
Certified to withstand: wind load (2400 Pascal) and snow load (5400 Pascal).

Higher Power Output

Module power increases 5-25% generally, bringing significantly lower LCOE and higher IRR.

TÜVRheinland CERTIFIED · CE · PV CYCLE · CLEAN ENERGY COUNCIL MEMBER · POSITIVE QUALITY™ Continuous Quality Assurance

LINEAR PERFORMANCE WARRANTY

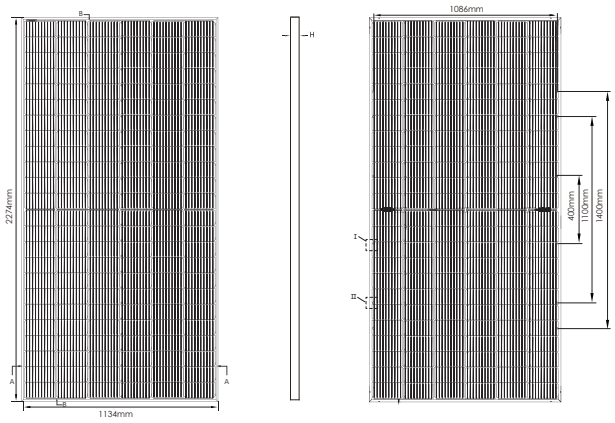


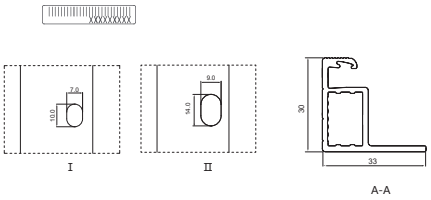
12 Year Product Warranty

30 Year Linear Power Warranty

0.45% Annual Degradation Over 30 years

Engineering Drawings





Length: ±2mm
Width: ±2mm
Height: ±1mm
Row Pitch: ±2mm

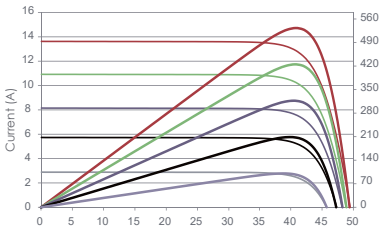
Packaging Configuration

(Two pallets = One stack)

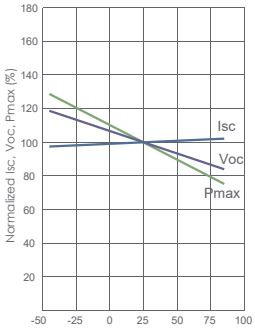
35pcs/pallets, 70pcs/stack, 700pcs/ 40'HQ Container

Electrical Performance & Temperature Dependence

Current-Voltage & Power-Voltage Curves (535W)



Temperature Dependence of Isc, Voc, Pmax



Mechanical Characteristics

Cell Type	P type Mono-crystalline
No. of cells	144 (6×24)
Dimensions	2274×1134×30mm (89.53×44.65×1.18 inch)
Weight	34.3 kg (75.62 lbs)
Front Glass	2.0mm, Anti-Reflection Coating
Back Glass	2.0mm, Heat Strengthened Glass
Frame	Anodized Aluminium Alloy
Junction Box	IP68 Rated
Output Cables	TUV 1×4.0mm² (+): 400mm , (-): 200mm or Customized Length

SPECIFICATIONS

Module Type	JKM525M-72HL4-BDVP		JKM530M-72HL4-BDVP		JKM535M-72HL4-BDVP		JKM540M-72HL4-BDVP		JKM545M-72HL4-BDVP	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax)	525Wp	391Wp	530Wp	394Wp	535Wp	398Wp	540Wp	402Wp	545Wp	405Wp
Maximum Power Voltage (Vmp)	40.36V	37.56V	40.49V	37.70V	40.63V	37.84V	40.76V	37.97V	40.89V	38.11V
Maximum Power Current (Imp)	13.01A	10.40A	13.09A	10.46A	13.17A	10.52A	13.25A	10.58A	13.33A	10.64A
Open-circuit Voltage (Voc)	48.86V	46.12V	48.99V	46.24V	49.13V	46.37V	49.26V	46.50V	49.39V	46.62V
Short-circuit Current (Isc)	13.69A	11.06A	13.77A	11.12A	13.85A	11.19A	13.93A	11.25A	14.01A	11.32A
Module Efficiency STC (%)	20.36%		20.55%		20.75%		20.94%		21.13%	
Operating Temperature(℃)	-40℃~+85℃									
Maximum system voltage	1500VDC (IEC)									
Maximum series fuse rating	30A									
Power tolerance	0~+3%									
Temperature coefficients of Pmax	-0.35%/℃									
Temperature coefficients of Voc	-0.28%/℃									
Temperature coefficients of Isc	0.048%/℃									
Nominal operating cell temperature (NOCT)	45±2℃									
Refer. Bifacial Factor	70±5%									

BIFACIAL OUTPUT-REARSIDE POWER GAIN

5%	Maximum Power (Pmax)	551Wp	557Wp	562Wp	567Wp	572Wp
	Module Efficiency STC (%)	21.38%	21.58%	21.78%	21.99%	22.19%
15%	Maximum Power (Pmax)	604Wp	610Wp	615Wp	621Wp	623Wp
	Module Efficiency STC (%)	23.41%	23.64%	23.86%	24.08%	24.30%
25%	Maximum Power (Pmax)	656Wp	663Wp	669Wp	675Wp	681Wp
	Module Efficiency STC (%)	25.45%	25.69%	25.93%	26.18%	26.42%

*STC: Irradiance 1000W/m² Cell Temperature 25℃ AM=1.5

NOCT: Irradiance 800W/m² Ambient Temperature 20℃ AM=1.5 Wind Speed 1m/s

NX Horizon-XTR

The industry's most advanced
all-terrain solar tracker

With more than 50 GW of smart solar trackers deployed globally, Nextracker invests in technology innovations to help our customers mitigate project risks, reduce costs, and achieve better financial returns. Introducing our new terrain-following tracker for sites with undulating terrain: NX Horizon-XTR™.

Key Features and Benefits

NX Horizon-XTR, the field-proven solar tracker for rolling terrain with more than 3 GW deployed on multiple continents.

SAVE PROJECT COST

LESS EARTHWORK
Reduce tracker related grading by up to 90%

SHORTER FOUNDATIONS
Reduce pile length by up to 36"

LESS RE-VEGETATION
Reduce area of land disturbance by up to 90%, minimizing the need to re-seed

REDUCE PROJECT RISK

SIMPLIFY PERMITTING
Less disturbed land reduces scope of environmental review

MITIGATE DELAYS
Reduces likelihood of grading-related delays

AVOID REMEDIATION
Less land disturbance mitigates risk of vegetation & soil erosion issues during plant operation and easing remediation risk

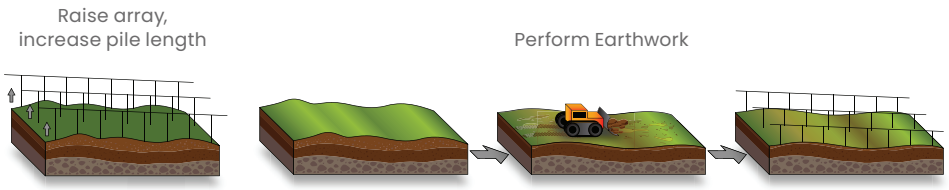
MINIMIZE ENVIRONMENTAL IMPACT

PRESERVE TOPSOIL
Preserve native topsoil layer and healthy vegetation lengths

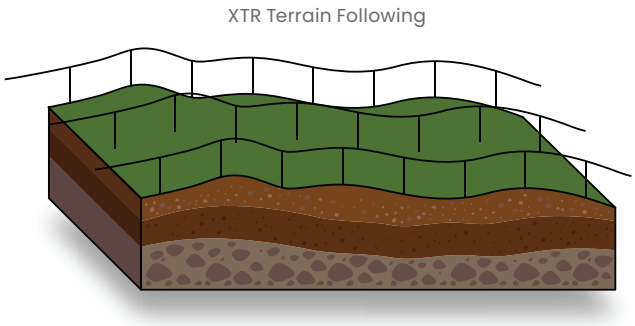
REDUCE DUST
Lesser land disturbance reduces construction dust

PREVENT SOIL EROSION
due to grading, topdressing, and hydrology impacts

Business as Usual – Increase Pile Length or Grade



With XTR – Follow the Grade



NX Horizon-XTR Highlights

EARTHWORKS SAVINGS:

1000–3000 cubic yards/MW savings

REDUCE ENVIRONMENTAL IMPACT:

Up to **5** acres/MW or **90% less** land disturbance

PIER SAVINGS:

5000–9000 lbs/MW savings

NX Horizon-XTR's ability to follow terrain can significantly reduce earthwork, allowing these otherwise infeasible sites to become economically viable solar projects. Less earthwork means lower upfront costs and improved scheduling--and less environmental impact. XTR has allowed us to win more projects by making us more competitive in our project bids, while also lowering our impact on the environment.

– Donny Gallagher, VP of engineering, SOLV Energy

SOLV ENERGY

For further information or to request a quote, please reach out to insidesales@nextracker.com

Efficient

- Up to 4 inverters can be transported in one standard shipping container
- Overdimensioning up to 150% is possible
- Full power at ambient temperatures of up to 35°C

Robust

- Intelligent air cooling system OptiCool for efficient cooling
- Suitable for outdoor use in all climatic ambient conditions worldwide

Flexible

- Conforms to all known grid requirements worldwide
- Q on demand
- Available as a single device or turn-key solution, including medium-voltage block

Easy to Use

- Improved DC connection area
- Connection area for customer equipment
- Integrated voltage support for internal and external loads

SUNNY CENTRAL
4000 UP-US / 4200 UP-US / 4400 UP-US / 4600 UP-US

The new Sunny Central: more power per cubic meter

With an output of up to 4600 kVA and system voltages of 1500 V DC, the SMA central inverter allows for more efficient system design and a reduction in specific costs for PV power plants. A separate voltage supply and additional space are available for the installation of customer equipment. True 1500 V technology and the intelligent cooling system OptiCool ensure smooth operation even in extreme ambient temperature as well as a long service life of 25 years.

SUNNY CENTRAL 4000 UP-US / 4200 UP-US

Technical data	SC 4000 UP-US	SC 4200 UP-US
Input (DC)		
MPP voltage range V_{DC} (at 25 °C / at 50 °C)	880 to 1325 V / 1100 V	921 to 1325 V / 1050 V
Min. input voltage $V_{DC, min}$ / Start voltage $V_{DC, Start}$	849 V / 1030 V	891 V / 1071 V
Max. input voltage $V_{DC, max}$	1500 V	1500 V
Max. input current $I_{DC, max}$	4750 A	4750 A
Max. short-circuit current $I_{DC, sc}$	6400 A	6400 A
Number of DC inputs	24 double pole fused (32 single pole fused)	
Max. number of DC cables per DC input (for each polarity)	2 x 800 kcmil, 2 x 400 mm²	
Integrated zone monitoring	○	
Available PV fuse sizes (per input)	200 A, 250 A, 315 A, 350 A, 400 A, 450 A, 500 A	
Available battery fuse size (per input)	750 A	
Output (AC)		
Nominal AC power at cos φ =1 (at 35°C / at 50°C)	4000 kVA[11] / 3600 kVA	4200 kVA[12] / 3780 kVA
Nominal AC power at cos φ =0.8 (at 35°C / at 50°C)	3200 kW[11] / 2880 kW	3360 kW[12] / 3024 kW
Nominal AC current $I_{AC, nom}$ (at 35°C / at 50°C)	3850 A / 3465 A	3850 A / 3465 A
Max. total harmonic distortion	< 3% at nominal power	< 3% at nominal power
Nominal AC voltage / nominal AC voltage range[1] [8]	600 V / 480 V to 720 V	630 V / 504 V to 756 V
AC power frequency / range	50 Hz / 47 Hz to 53 Hz 60 Hz / 57 Hz to 63 Hz	
Min. short-circuit ratio at the AC terminals[9]	> 2	
Power factor at rated power / displacement power factor adjustable[8] [10]	1 / 0.8 overexcited to 0.8 underexcited	
Efficiency		
Max. efficiency[2] / European efficiency[2] / CEC efficiency[3]	98.7% / 98.6% / 98.5%	98.7% / 98.6% / 98.5%
Protective Devices		
Input-side disconnection point	DC load break switch	
Output-side disconnection point	AC circuit breaker	
DC overvoltage protection	Surge arrester, type I	
AC overvoltage protection (optional)	Surge arrester, class I	
Lightning protection (according to IEC 62305-1)	Lightning Protection Level III	
Ground-fault monitoring / remote ground-fault monitoring	○ / ○	
Insulation monitoring	○	
Degree of protection	NEMA 3R	
General Data		
Dimensions (W / H / D)	2780 / 2318 / 1588 mm (109.4 / 91.3 / 62.5 inch)	
Weight	<3700 kg / < 8158 lb	
Self-consumption (max.[4] / partial load[5] / average[6])	< 8100 W / < 1800 W / < 2000 W	
Self-consumption (standby)	< 370 W	
Internal auxiliary power supply	○ Integrated 8.4 kVA transformer	
Operating temperature range[8]	−25°C to 60°C / −13°F to 140°F	
Noise emission[7]	67.0 dB(A)*	
Temperature range (standby)	−40°C to 60°C / −40°F to 140°F	
Temperature range (storage)	−40°C to 70°C / −40°F to 158°F	
Max. permissible value for relative humidity (condensing / non-condensing)	95% to 100% (2 month/year) / 0% to 95%	
Maximum operating altitude above MSL[8] 1000 m / 2000 m	● / ○ (earlier temperature-dependent derating)	
Fresh air consumption	6500 m³/h	
Features		
DC connection	Terminal lug on each input (without fuse)	
AC connection	With busbar system (three busbars, one per line conductor)	
Communication	Ethernet, Modbus Master, Modbus Slave	
Communication with SMA string monitor (transmission medium)	Modbus TCP / Ethernet (FO MM, Cat-5)	
Enclosure / roof color	RAL 9016 / RAL 7004	
Supply transformer for external loads	○ (2.5 kVA)	
Standards and directives complied with	UL 62109-1, UL 1741 (Chapter 31, CDR 6I), UL 1741-SA, UL 1998, IEEE 1547, MIL-STD-810G	
EMC standards	FCC Part 15 Class A	
Quality standards and directives complied with	VDI/VDE 2862 page 2, DIN EN ISO 9001	

● Standard features ○ Optional

1) At nominal AC voltage, nominal AC power decreases in the same proportion
2) Efficiency measured without internal power supply
3) Efficiency measured with internal power supply
4) Self-consumption at rated operation
5) Self-consumption at < 75% Pn at 25°C
6) Self-consumption averaged out from 5% to 100% Pn at 25°C
7) Sound pressure level at a distance of 10 m
8) Values apply only to inverters. Permissible values for SMA MV solutions from SMA can be found in the corresponding data sheets.
9) A short-circuit ratio of < 2 requires a special approval from SMA
10) Depending on the DC voltage
11) Nominal power at 35°C max DC voltage of 1050 V
12) Nominal power at 35°C max DC voltage of 1000 V
13) Nominal power at 35°C max DC voltage of 1040 V

SUNNY CENTRAL 4400 UP-US / 4600 UP-US

Technical data	SC 4400 UP-US	SC 4600 UP-US
Input (DC)		
MPP voltage range V_{DC} (at 25 °C / at 50 °C)	962 to 1325 V / 1000 V	1003 to 1325 V / 1040 V
Min. input voltage $V_{DC, min}$ / Start voltage $V_{DC, Start}$	934 V / 1112 V	976 V / 1153 V
Max. input voltage $V_{DC, max}$	1500 V	1500 V
Max. input current $I_{DC, max}$	4750 A	4750 A
Max. short-circuit current $I_{DC, sc}$	6400 A	6400 A
Number of DC inputs	24 double pole fused (32 single pole fused)	
Max. number of DC cables per DC input (for each polarity)	2 x 800 kcmil, 2 x 400 mm²	
Integrated zone monitoring	○	
Available PV fuse sizes (per input)	200 A, 250 A, 315 A, 350 A, 400 A, 450 A, 500 A	
Available battery fuse size (per input)	750 A	
Output (AC)		
Nominal AC power at cos φ =1 (at 35°C / at 50°C)	4400 kVA[12] / 3960 kVA	4600 kVA[13] / 4140 kVA
Nominal AC power at cos φ =0.8 (at 35°C / at 50°C)	3520 kW[12] / 3168 kW	3680 kW[13] / 3312 kW
Nominal AC current $I_{AC, nom}$ (at 35°C / at 50°C)	3850 A / 3465 A	3850 A / 3465 A
Max. total harmonic distortion	< 3% at nominal power	< 3% at nominal power
Nominal AC voltage / nominal AC voltage range[1] [8]	660 V / 528 V to 759 V	690 V / 552 V to 759 V
AC power frequency / range	50 Hz / 47 Hz to 53 Hz 60 Hz / 57 Hz to 63 Hz	
Min. short-circuit ratio at the AC terminals[9]	> 2	
Power factor at rated power / displacement power factor adjustable[8] [10]	1 / 0.8 overexcited to 0.8 underexcited	
Efficiency		
Max. efficiency[2] / European efficiency[2] / CEC efficiency[3]	98.7% / 98.6% / 98.5%	98.7% / 98.6% / 98.5%
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Lightning protection (according to IEC 62305-1)	Lightning Protection Level III	
Ground-fault monitoring / remote ground-fault monitoring	○ / ○	
Insulation monitoring	○	
Degree of protection	NEMA 3R	
General Data		
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Maximum operating altitude above MSL[8] 1000 m / 2000 m	● / ○ (earlier temperature-dependent derating)	
Fresh air consumption	6500 m³/h	
Features		
DC connection	Terminal lug on each input (without fuse)	
AC connection	With busbar system (three busbars, one per line conductor)	
Communication	Ethernet, Modbus Master, Modbus Slave	
Communication with SMA string monitor (transmission medium)	Modbus TCP / Ethernet (FO MM, Cat-5)	
Enclosure / roof color	RAL 9016 / RAL 7004	
Supply transformer for external loads	○ (2.5 kVA)	
Standards and directives complied with	UL 62109-1, UL 1741 (Chapter 31, CDR 6I), UL 1741-SA, UL 1998 IEEE 1547, MIL-STD-810G	
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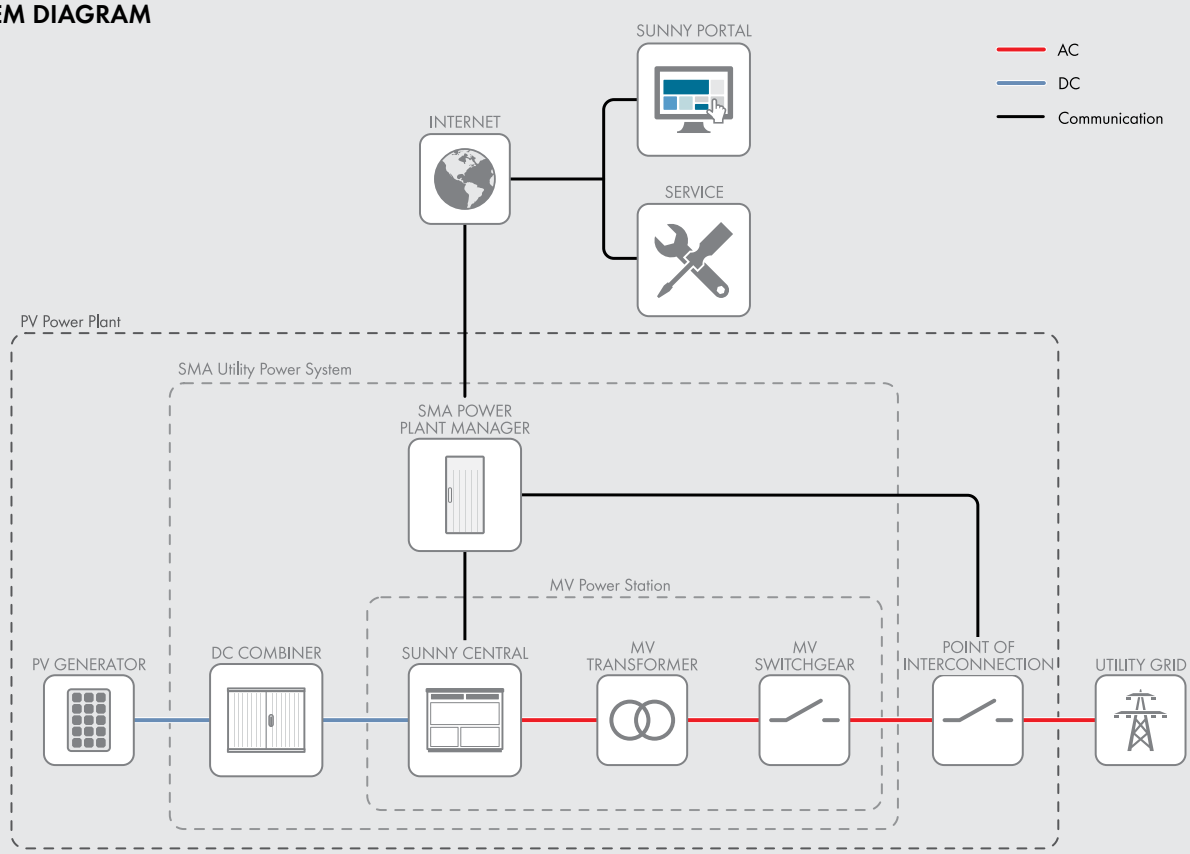
9) A short-circuit ratio of < 2 requires a special approval from SMA
10) Depending on the DC voltage
11) Nominal power at 35°C max DC voltage of 1050 V
12) Nominal power at 35°C max DC voltage of 1000 V
13) Nominal power at 35°C max DC voltage of 1040 V

SYSTEM DIAGRAM



TEMPERATURE BEHAVIOR (at 1000 m)