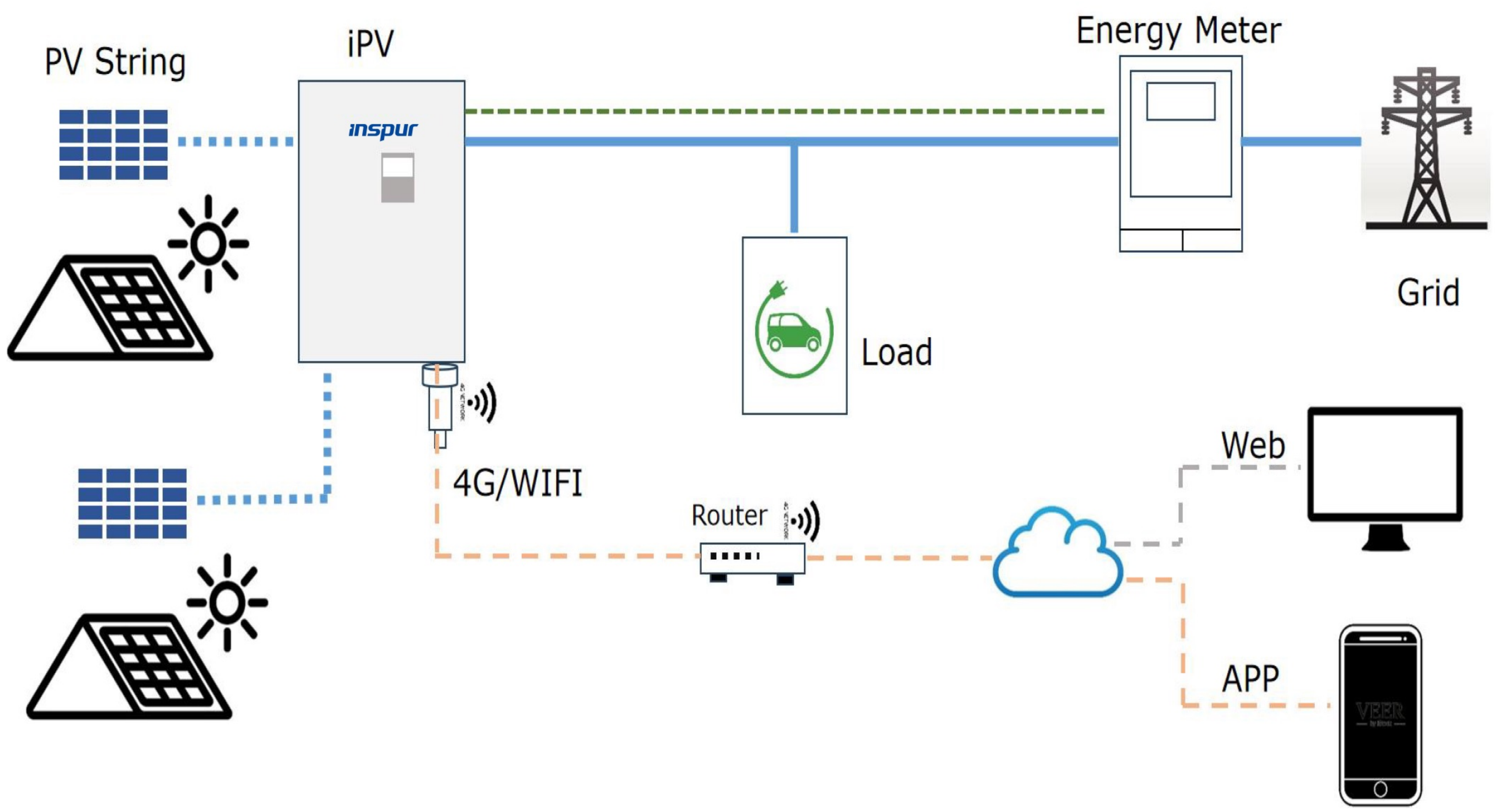
Core Products: Inspur PV Inverter (iPV)

PV inverter is an intelligent AC/DC conversion device launched by the company for solar photovoltaic power plants. It has advanced intelligent MPPT technology, anti islanding, string monitoring, I-V curve scanning diagnosis and other functions. It has the characteristics of efficient power generation, intelligent operation and maintenance, safety and reliability, and realizes intelligent management of multi scenario applications of solar photovoltaic power generation systems.

Produt Application Diagram



Advantages:

- Multi-channel MPPT； Efficient power generation。
- Maximum efficiency 99%； Safe and reliable。
- SVG at night； Intelligent maintenance。
- Cost savings； Intelligent IV scanning。

Inspur PV inverter product series

- ◆ iPV-5～10K-A1
- ◆ iPV-10～28K-A1
- ◆ iPV-30～40K-A1
- ◆ iPV-50～75K-A1
- ◆ iPV-80～125K-A1
- ◆ iPV-100～136K-A1-HV
- ◆ iPV-225～320K-A1-HV

iPV-5 ~ 10K-A1
Single Phase& Dual-MPPT

CQC Gold Sun Certification
TUV Certification
SAA Certification.
CE Certification

Total current THD <2%,Small size, light weight, support manual installation

Continuously adjustable active power(0-100%)function

max.efficiency is up to 98.1% ,Euro.efficiency is up to 97.6%

Multi-communication interface:RS485,GPRS(optional),Wifi(optional)

Active and passive anti-islanding protection

TECHNICAL SPECIFICATION				
Model Name	iPV-5K-A1	iPV-6K-A1	iPV-8K-A1	iPV-10K-A1
INPUT				
Max. DC input power	7.5 kW	9 kW	12 kW	15 kW
Max. DC input voltage	550V			
Max. DC input current	20/20A	20/26A		20/30A
MPPT voltage range	80-550V			
Recommended MPPT operating voltage	360V			
Starting voltage	50V			
No. Of MPPT	2			
Max. no. of strings per MPPT	1/1		1/2	
Output				
Rated output power	5 kW	6 kW	8 kW	10 kW
Max. output power	5.5 kVA	6.6 kVA	8.8 kVA	11 kVA
Max. output current	25 A	27.3 A	36.4 A	45.5 A
Rated grid voltage	230V			
Grid voltage range	90-290Vac			
Rated grid frequency	50/60Hz			
Grid frequency range	45-55Hz / 55-65Hz			
THD	<2% (Under the rated power)			
Power factor	>0.99 (Under the rated power) / Adjustable range: 0.8 leading~0.8 lagging			
DC current injection	<0.5% (Under the rated power)			
System data				
Max. efficiency	98.1%	98.1%	98.1%	98.1%
Euro. efficiency	97.5%	97.5%	97.5%	97.6%
Humidity range	0-100%, non-condensing			
Cooling type	Natural cooling		Intelligent forced air cooling	
Temperature range	-25 ~ +60℃			
Power consumption at night	<1W			
Max. working altitude	4000m			
Display	LED(opetional: LCD)			
Communication interface	WIFI(optional: RS485 or GPRS)			
Protection				
DC reverse-polarity protection	Yes			
Short circuit protection	Yes			
Output over current protection	Yes			
Output over voltage protection	Yes			
Insulation resistance monitoring	Yes			
Residual current detection	Yes			
Surge protection	Yes			
Grid monitoring	Yes			
Islanding protection	Yes			
Temperature protection	Yes			
Integrated DC switch	Yes			
Mechanical data				
Dimensions (W*H*D)	347*368*167mm		347*368*190mm	
Weight	10kg		11kg	
Protection class	IP66			
Standard				
Safety standard/EMC standard	NB/T32004-2018,EC62109,IEC61000,IS16169 &IS16221(BIS)			
Grid-connected standard	EC61727,EN50549-1. VDE-4105, NRS-097-2-1. OVE-Richtlinie R25, UNE217001/2. Ordinace No.140			
Other standard	EC61683,IEC62116,EN50530.IEC60068			

iPV-10 ~ 28K-A1
Three Phase& Dual-MPPT

CQC Gold Sun Certification
TUV Certification
SAA Certification.
CE Certification

Total current THD <2%,Three-level SVPWM control technology

Adiustable reactive power, power factor from 0.8 leading to 0.8 lagging

max.efficiency is up to 98.8% ,Euro.efficiency is up to 98.2%

Multi-communication interface:RS485,GPRS(optional),Wifi(optional)

Active and passive anti-islanding protection

TECHNICAL SPECIFICATION								
Model Name	iPV-10K-A1	iPV-12K-A1	iPV-15K-A1	iPV-17K-A1	iPV-20K-A1	iPV-23K-A1	iPV-25K-A1	iPV-28K-A1
INPUT								
Max. DC input power	15 kW	18 kW	22.5 kW	25.5 kW	30 kW	34.5 kW	37.5 kW	43 kW
Max. DC input voltage	1100V							
Max. DC input current	20/20A		20/30A		30/30A		40/30A	40/40A
MPPT voltage range	180-1000V							
Recommended MPPT operating voltage	650V							
Starting voltage	180V							
No. Of MPPT	2		2		2			
Max. no. of strings per MPPT	1/1		1/2		2/2			
Output								
Rated output power	10 kW	12 kW	15 kW	17 kW	20 kW	23 kW	25 kW	28 kW
Max. output power	11 kVA	13.2 kVA	16.5 kVA	18.7 kVA	22 kVA	25.3 kVA	27.5 kVA	30.8 kVA
Max. output current	16.7 A	20 A	24 A	28.3 A	32 A	36.5 A	41 A	45 A
Rated grid voltage	400V							
Grid voltage range	310-480Vac							
Rated grid frequency	50/60Hz							
Grid frequency range	45-55Hz / 55-65Hz							
THD	<2% (Under the rated power)							
Power factor	>0.99 (Under the rated power) / Adjustable range: 0.8 leading~0.8 lagging							
DC current injection	<0.5% (Under the rated power)							
System data								
Max. efficiency	98.6%	98.7%	98.7%	98.7%	98.8%			
Euro. efficiency	98.2%	98.1%	98.2%	98.2%	98.2%			
Humidity range	0-100%, non-condensing							
Cooling type	Intelligent forced air cooling							
Temperature range	-25 ~ +60℃							
Power consumption at night	<1W							
Max. working altitude	4000m							
Display	LED(opetional: LCD)							
Communication interface	WIFI(optional: RS485 or GPRS)							
Protection								
DC reverse-polarity protection	Yes							
Short circuit protection	Yes							
Output over current protection	Yes							
Output over voltage protection	Yes							
Insulation resistance monitoring	Yes							
Residual current detection	Yes							
Surge protection	Yes							
Grid monitoring	Yes							
Islanding protection	Yes							
Temperature protection	Yes							
Integrated DC switch	Yes							
Mechanical data								
Dimensions (W*H*D)	427*450*204mm							
Weight	15kg				18kg			
Protection class	IP66							
Standard								
Safety standard/EMC standard	NB/T32004-2018,EC62109,IEC61000,IS16169 &IS16221(BIS)							
Grid-connected standard	EC61727,EN50549-1. VDE-4105, NRS-097-2-1. OVE-Richtlinie R25, UNE217001/2. Ordinace No.140							
Other standard	EC61683,IEC62116,EN50530.IEC60068							

iPV-30～40K-A1
Three Phase& Multi-MPPT

CQC Gold Sun Certification
TUV Certification
SAA Certification.
CE Certification

Total current THD <2%,Three-level SVPWM control technology

Adiustable reactive power, power factor from 0.8 leading to 0.8 lagging

max.efficiency is up to 98.7% ,Euro.efficiency is up to 98.1%

Multi-communication interface:RS485,GPRS(optional),Wifi(optional)

Active and passive anti-islanding protection

TECHNICAL SPECIFICATION				
Model Name	iPV-30K-A1	iPV-33K-A1	iPV-36K-A1	iPV-40K-A1
INPUT				
Max. DC input power	45 kW	49.5 kW	54 kW	60 kW
Max. DC input voltage	1100V			
Max. DC input current	40/40/20A			
MPPT voltage range	200-1000Vdc			
Recommended MPPT operating voltage	650V			
Starting voltage	180V			
No. Of MPPT	3			
Max. no. of strings per MPPT	2/2/1			
Output				
Rated output power	30 kW	33 kW	36 kW	40 kW
Max. output power	33 kVA	36.3 kVA	39.6 kVA	44 kVA
Max. output current	48 A	53 A	56 A	66 A
Rated grid voltage	400Vac			
Grid voltage range	310-480Vac			
Rated grid frequency	50/60Hz			
Grid frequency range	45-55Hz / 55-65Hz			
THD	<2% (Under the rated power)			
Power factor	>0.99 (Under the rated power) / Adjustable range: 0.8 leading~0.8 lagging			
DC current injection	<0.5% (Under the rated power)			
System data				
Max. efficiency	98.6%	98.6%	98.6%	98.7%
Euro. efficiency	98.1%	98.1%	98.1%	98.1%
Humidity range	0-100%, non-condensing			
Cooling type	Intelligent forced air cooling			
Temperature range	-25 ~ +60℃			
Power consumption at night	<1W			
Max. working altitude	4000m			
Display	LED(opetional: LCD)			
Communication interface	WIFI(optional: RS485 or GPRS)			
Protection				
DC reverse-polarity protection	Yes			
Short circuit protection	Yes			
Output over current protection	Yes			
Output over voltage protection	Yes			
Insulation resistance monitoring	Yes			
Residual current detection	Yes			
Surge protection	Yes			
Grid monitoring	Yes			
Islanding protection	Yes			
Temperature protection	Yes			
Integrated DC switch	Yes			
Mechanical data				
Dimensions (W*H*D)	460*476*228.5mm			
Weight	23kg			
Protection class	IP66			
Standard				
Safety standard/EMC standard	NB/T32004-2018,EC62109,IEC61000,IS16169 &IS16221(BIS)			
Grid-connected standard	EC61727,EN50549-1. VDE-4105, NRS-097-2-1. OVE-Richtlinie R25, UNE217001/2. Ordinace No.140			
Other standard	EC61683,IEC62116,EN50530.IEC60068			

iPV-50 ~ 75K-A1
Three Phase& Multi-MPPT

CQC Gold Sun Certification
TUV Certification
SAA Certification.
CE Certification

Total current THD <2%,Three-level SVPWM control technology

Adiustable reactive power, power factor from 0.8 leading to 0.8 lagging

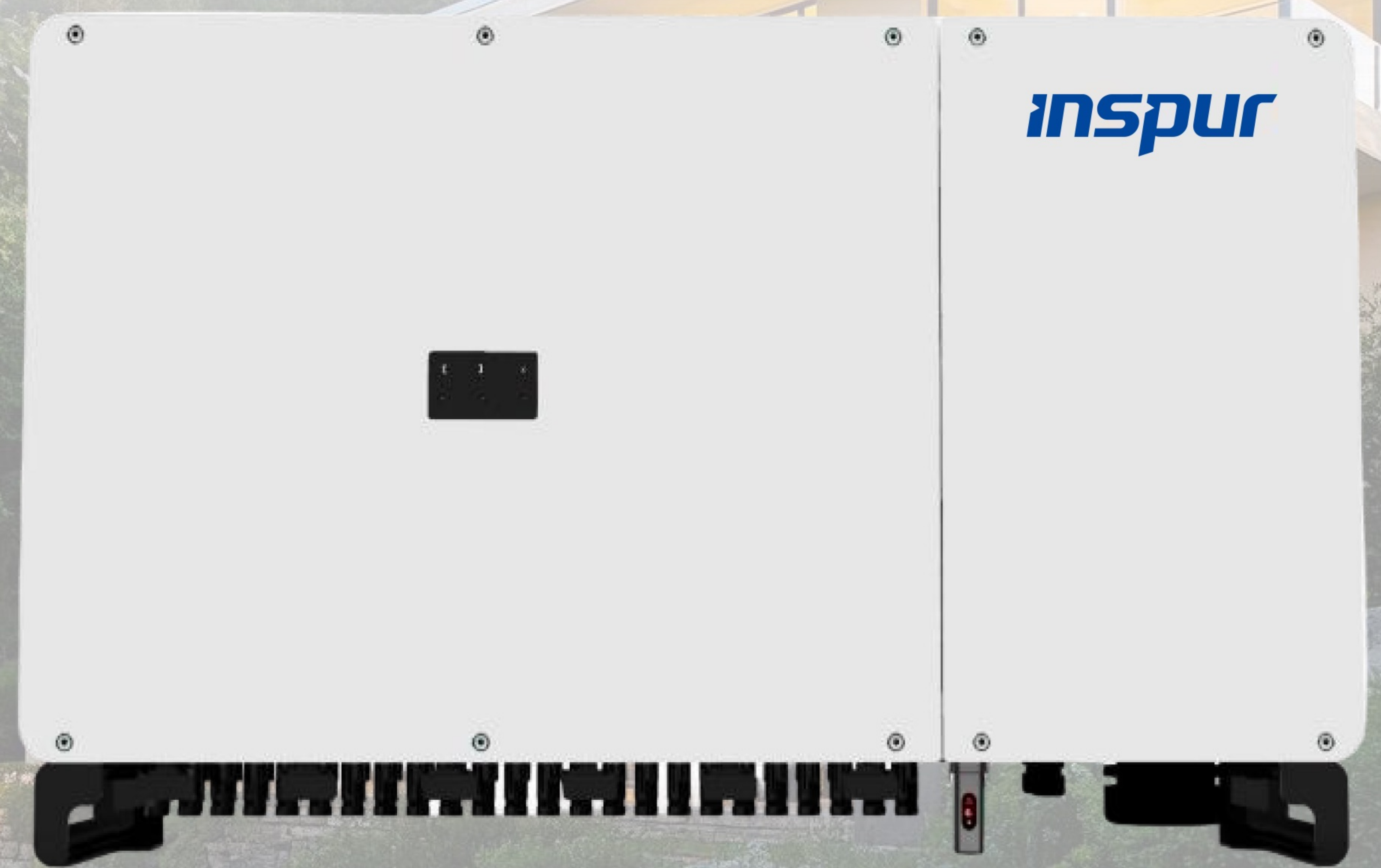
max.efficiency is up to 99% ,Euro.efficiency is up to 98.5%

Multi-communication interface:RS485,GPRS(optional),Wifi(optional)

Active and passive anti-islanding protection Continuously adjustable active power(0-100%) function

TECHNICAL SPECIFICATION					
Model Name	iPV-50K-A1	iPV-60K-A1	iPV-70K-A1	iPV-70K-A1-HV	iPV-75K-A1-HV
INPUT					
Max. DC input power	65 kW	78 kW	105 kW	91 kW	97.5 kW
Max. DC input voltage	1100V				
Max. DC input current	45/45/45A		45A*4	45/45/45A	
MPPT voltage range	250-1100V		180-1000V	250-1100V	
Recommended MPPT operating voltage	650V		550-850V	740V	
Starting voltage	300V		180V	300V	
No. Of MPPT	3		4	3	
Max. no. of strings per MPPT	4		3	4	
Output					
Rated output power	50 kW	60 kW	70 kW	70 kW	75 kW
Max. output power	55 kVA	66 kVA	77 kVA	77 kVA	82.5 kVA
Max. output current	80 A	96 A	113A	89 A	95 A
Rated grid voltage	400 V			500 V	
Grid voltage range	310-480Vac			422-550Vac	
Rated grid frequency	50/60Hz				
Grid frequency range	45-55Hz / 55-65Hz				
THD	<2% (Under the rated power)				
Power factor	>0.99 (Under the rated power) / Adjustable range: 0.8 leading~0.8 lagging				
DC current injection	<0.5% (Under the rated power)				
System data					
Max. efficiency	98.7%	98.9%	98.7%	99%	
Euro. efficiency	98.3%	98.5%	98.1%	98.5%	
Humidity range	0-100%, non-condensing				
Cooling type	Intelligent forced air cooling				
Temperature range	-25 ~ +60℃				
Power consumption at night	<1W				
Max. working altitude	4000m				
Display	LED(opetional: LCD)				
Communication interface	WIFI(optional: RS485 or GPRS)				
Protection					
DC reverse-polarity protection	Yes				
Short circuit protection	Yes				
Output over current protection	Yes				
Output over voltage protection	Yes				
Insulation resistance monitoring	Yes				
Residual current detection	Yes				
Surge protection	Yes				
Grid monitoring	Yes				
Islanding protection	Yes				
Temperature protection	Yes				
Integrated DC switch	Yes				
Mechanical data					
Dimensions (W*H*D)	282*681*660mm		733*586*262mm	282*681*660mm	
Weight	47kg		50kg	47kg	
Protection class	IP66				
Standard					
Safety standard/EMC standard	NB/T32004-2018,EC62109,IEC61000,IS16169 &IS16221(BIS)				
Grid-connected standard	EC61727,EN50549-1. VDE-4105, NRS-097-2-1. OVE-Richtlinie R25, UNE217001/2. Ordinace No.140				
Other standard	EC61683,IEC62116,EN50530.IEC60068				

iPV-80 ~ 125K-A1
Three Phase& Multi-MPPT



CQC Gold Sun Certification
TUV Certification
SAA Certification.
CE Certification

Total current THD <2%,Three-level SVPWM control technology

Adiustable reactive power, power factor from 0.8 leading to 0.8 lagging

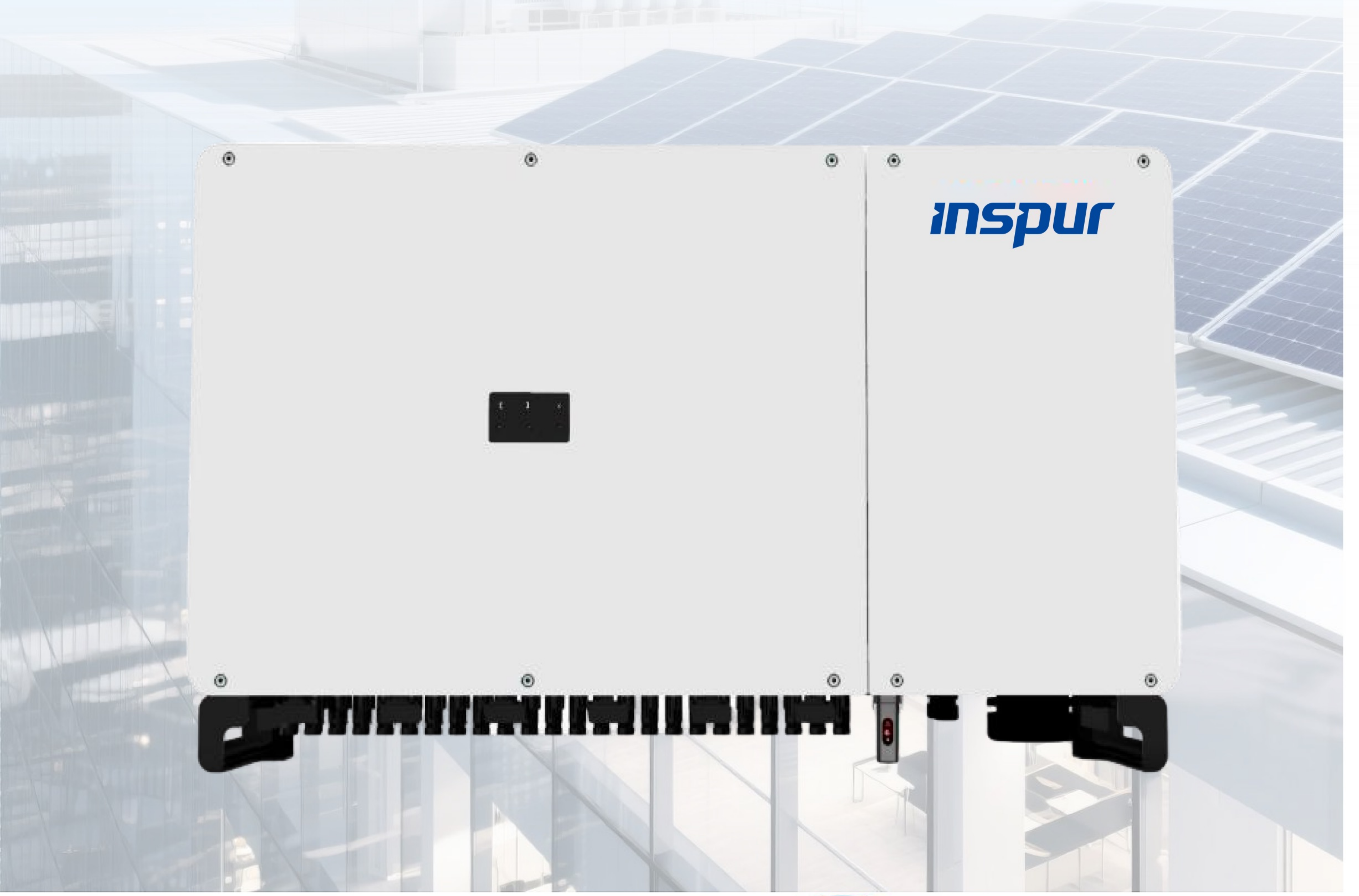
max.efficiency is up to 98.9% ,Euro.efficiency is up to 98.2%

Multi-communication interface:RS485,GPRS(optional),Wifi(optional)

Active and passive anti-islanding protection
Continuously adjustable active power(0-100%) function

TECHNICAL SPECIFICATION					
Model Name	iPV-80K-A1	iPV-90K-A1	iPV-100K-A1	iPV-110K-A1	iPV-125K-A1
INPUT					
Max. DC input power	120 kW	135 kW	150 kW	165 kW	187.5 kW
Max. DC input voltage	1100V				
Max. DC input current	30A*8	30A*9	30A*10		
MPPT voltage range	200-1000V				
Recommended MPPT operating voltage	600V				
Starting voltage	300V				
No. Of MPPT	8	9	10		
Max. no. of strings per MPPT	2				
Output					
Rated output power	80 kW	90 kW	100 kW	110 kW	125 kW
Max. output power	88 kVA	99 kVA	110 kVA	121 kVA	137.5 kVA
Max. output current	127 A	142.9 A	158.8 A	174.6 A	199.3 A
Rated grid voltage	400V				
Grid voltage range	310-480Vac				
Rated grid frequency	50/60Hz				
Grid frequency range	45-55Hz / 55-65Hz				
THD	<2% (Under the rated power)				
Power factor	>0.99 (Under the rated power) / Adjustable range: 0.8 leading~0.8 lagging				
DC current injection	<0.5% (Under the rated power)				
System data					
Max. efficiency	98.6%	98.6%	98.7%	98.7%	98.9%
Euro. efficiency	98.1%	98.1%	98.1%	98.1%	98.2%
Humidity range	0-100%, non-condensing				
Cooling type	Intelligent forced air cooling				
Temperature range	-25 ~ +60℃				
Power consumption at night	<1W				
Max. working altitude	4000m				
Display	LED(optional: LCD)				
Communication interface	WIFI(optional: RS485 or GPRS)				
Protection					
DC reverse-polarity protection	Yes				
Short circuit protection	Yes				
Output over current protection	Yes				
Output over voltage protection	Yes				
Insulation resistance monitoring	Yes				
Residual current detection	Yes				
Surge protection	Yes				
Grid monitoring	Yes				
Islanding protection	Yes				
Temperature protection	Yes				
Integrated DC switch	Yes				
Mechanical data					
Dimensions (W*H*D)	1050*620*333mm				
Weight	85kg				
Protection class	IP66				
Standard					
Safety standard/EMC standard	NB/T32004-2018,EC62109,IEC61000,IS16169 &IS16221(BIS)				
Grid-connected standard	EC61727,EN50549-1. VDE-4105, NRS-097-2-1. OVE-Richtlinie R25, UNE217001/2. Ordinace No.140				
Other standard	EC61683,IEC62116,EN50530.IEC60068				

iPV-100 ~ 136K-A1-HV
Three Phase& Multi-MPPT



CQC Gold Sun Certification
TUV Certification
SAA Certification.
CE Certification

Total current THD <2%,Three-level SVPWM control technology

Adiustable reactive power, power factor from 0.8 leading to 0.8 lagging

max.efficiency is up to 98.9% ,Euro.efficiency is up to 98.4%

Multi-communication interface:RS485,GPRS(optional),Wifi(optional)

Active and passive anti-islanding protection
Continuously adjustable active power(0-100%) function

TECHNICAL SPECIFICATION			
Model Name	iPV-100K-A1-HV	iPV-125K-A1-HV	iPV-136K-A1-HV
INPUT			
Max. DC input power	150 kW	187.5 kW	204 kW
Max. DC input voltage	1100V		
Max. DC input current	30A*10		
MPPT voltage range	200-1000V		
Recommended MPPT operating voltage	720V		
Starting voltage	300V		
No. Of MPPT	10		
Max. no. of strings per MPPT	2		
Output			
Rated output power	100 kW	125 kW	136 kW
Max. output power	110 kVA	138 kVA	150 kVA
Max. output current	127 A	158.8 A	172.6 A
Rated grid voltage	500V		
Grid voltage range	422-550Vac		
Rated grid frequency	50/60Hz		
Grid frequency range	45-55Hz / 55-65Hz		
THD	<2% (Under the rated power)		
Power factor	>0.99 (Under the rated power) / Adjustable range: 0.8 leading~0.8 lagging		
DC current injection	<0.5% (Under the rated power)		
System data			
Max. efficiency	98.9%	98.9%	98.9%
Euro. efficiency	98.3%	98.4%	98.4%
Humidity range	0-100%, non-condensing		
Cooling type	Intelligent forced air cooling		
Temperature range	-25 ~ +60℃		
Power consumption at night	<1W		
Max. working altitude	4000m		
Display	LED(optional: LCD)		
Communication interface	WIFI(optional: RS485 or GPRS)		
Protection			
DC reverse-polarity protection	Yes		
Short circuit protection	Yes		
Output over current protection	Yes		
Output over voltage protection	Yes		
Insulation resistance monitoring	Yes		
Residual current detection	Yes		
Surge protection	Yes		
Grid monitoring	Yes		
Islanding protection	Yes		
Temperature protection	Yes		
Integrated DC switch	Yes		
Mechanical data			
Dimensions (W*H*D)	1050*620*333mm		
Weight	85kg		
Protection class	IP66		
Standard			
Safety standard/EMC standard	NB/T32004-2018,EC62109,IEC61000,IS16169 &IS16221(BIS)		
Grid-connected standard	EC61727,EN50549-1. VDE-4105, NRS-097-2-1. OVE-Richtlinie R25, UNE217001/2. Ordinace No.140		
Other standard	EC61683,IEC62116,EN50530.IEC60068		

iPV-225 ~ 320K-A1-HV
Three Phase& Multi-MPPT

CQC Gold Sun Certification
TUV Certification
SAA Certification.
CE Certification

Total current THD <3%,Three-level SVPWM control technology

Adiustable reactive power, power factor from 0.8 leading to 0.8 lagging

max.efficiency is up to 99.02% ,Euro.efficiency is up to 98.51%

Multi-communication interface:RS485,GPRS(optional),Wifi(optional)

Active and passive anti-islanding protection Continuously adjustable active power(0-100%) function

TECHNICAL SPECIFICATION

Model Name	iPV-225K-A1-HV	iPV-320K-A1-HV
INPUT		
Max. DC input power	337.5 kW	480 kW
Max. DC input voltage	1500V	
Max. DC input current	40A*12	40A*12 (Optional: 30A*14/30A*16)
MPPT voltage range	500-1500V	
Recommended MPPT operating voltage	1080V	
Starting voltage	550V	
No. Of MPPT	12	12 (Optional:14/16)
Max. no. of strings per MPPT	2	
Output		
Rated output power	225 kW	320 kW
Max. output power	247.5 kVA	352 kVA
Max. output current	178.7 A	254 A
Rated grid voltage	800V	
Grid voltage range	640-920Vac	
Rated grid frequency	50/60Hz	
Grid frequency range	45-55Hz / 55-65Hz	
THD	<3% (Under the rated power)	
Power factor	>0.99 (Under the rated power) / Adjustable range: 0.8 leading~0.8 lagging	
DC current injection	<0.5% (Under the rated power)	
System data		
Max. efficiency	99.02%	99.02%
Euro. efficiency	98.51%	98.52%
Humidity range	0-100%, non-condensing	
Cooling type	Intelligent forced air cooling	
Temperature range	-30 ~ +60℃	
Power consumption at night	≤2W	
Max. working altitude	5000m (frequency-decreasing above 4000m)	
Display	LED, Bluetooth+APP(opetional: LCD)	
Communication interface	WIFI(optional: RS485 or GPRS)	
Protection		
DC reverse-polarity protection	Yes	
Short circuit protection	Yes	
Output over current protection	Yes	
Output over voltage protection	Yes	
Insulation resistance monitoring	Yes	
Residual current detection	Yes	
Surge protection	Yes	
Grid monitoring	Yes	
Islanding protection	Yes	
Temperature protection	Yes	
Integrated DC switch	Yes	
Mechanical data		
Dimensions (W*H*D)	1008*700*351mm	1136*870*361mm
Weight	96kg	116kg
Protection class	IP66	
Standard		
Safety standard/EMC standard	NB/T32004-2018,EC62109,IEC61000,IS16169 &IS16221(BIS)	
Grid-connected standard	EC61727,EN50549-1. VDE-4105, NRS-097-2-1. OVE-Richtlinie R25, UNE217001/2. Ordinace No.140	
Other standard	EC61683,IEC62116,EN50530.IEC60068	