Grid connected inverter

Product Introduction：

The NE series wind turbine/ Hydroelectric power generation conservancy grid connected inverter is a core component of the grid connected power generation system. It is controlled by a dedicated digital DSP chip from TI, assembled using well-known IGBT modules such as Infineon, and adopts current controlled PWM active inverter technology, greatly improving the reliability of the power supply. The power protection function is complete, the power factor on the grid side is high, and the output harmonics are low, achieving pollution-free grid connected power supply.

Product features:

- Complete protection functions and high system reliability.
- Using MPPT algorithm control, real-time tracking of generator output power.
- Equipped with disturbance detection technology to achieve anti islanding control.
- Output pure sine wave, automatically synchronized with the power grid for tracking, low harmonic content, no pollution to the power grid, and no impact.
- Equipped with RS482, RS232, WIFI and other communication, capable of monitoring on the upper computer, achieving remote data collection and monitoring.

Grid connected inverter specifications：

- **NE-KS series (50KW-1000KW, optional DC input/AC input, with isolation transformer)**









Technical parameters of NE-KS series grid-connected converter (DC input, including isolation transformer)

Model	NE-50KS	NE-100KS	NE-150KS	NE-250KS	NE-500KS
Isolation	Low frequency transformer isolation				
Rated power	50KW	100KW	150KW	250KW	500KW
Max. DC input voltage	800Vdc			1100Vdc	
MPPT range	400~800Vdc			650-1100Vdc（Adjustable）	
Max. AC output power	55KW	110KW	165KW	275KW	550KW
Current harmonics THD	≤ 3%(Rated power)				
Power Factor	>0.99				
Maximum efficiency	94.5%				
Output rating voltage	Three-phase 400Vac /220Vac (Customizable)				
Allowed Grid Voltage Range	350~450Vac/180~265Vac				
Output rating Frequency	50Hz/60Hz				
Allowed Grid Frequency Range	48.5~51.5Hz/58.5~61.5Hz				
Automatically put into operation conditions	DC input and power to meet the requirements, the inverter automatically run				
Automatic restart after power failure time	2min (Time is adjustable)				
Protection	Reverse polarity protection, short circuit protection, island effect, thermal protection, overload protection, etc.				
Communication Interface	RS485/RS232 / Ethernet				
Display mode	Touch screen				
Operating Temperature	-25°C~+55°C				
Relative Humidity	0~95%, No Condensing				
Altitude	≤ 2000 m (over 2000 m with derating required)				
Cooling method	Forced air cooling				
Noise	≤65db				
Protection class	IP20				
W × D × H(mm)	800*650*1900	1000*1000*1900		1800*1000*1900	2200*1000*1900
Weight(kg)	650	750	1000	1500	2000

Technical parameters of NE-KS series grid-connected converter (AC input, including isolation transformer)

Model	NE-50KS	NE-100KS	NE-150KS	NE-250KS	NE-500KS
Isolation	Low frequency transformer isolation				
Rated power	50KW	100KW	150KW	250KW	500KW
Recommended generator rated voltage	AC 400V			AC 600-690V	
Max.AC input voltage	550Vac			750Vac	
AC input voltage range	300~550Vac			450-750Vac	
Max. DC input voltage	800Vdc			1100Vdc	
MPPT range	400~800Vdc			650-1100Vdc	
Max. AC output power	55KW	110KW	165KW	275KW	550KW
Current harmonics THD	⩽ 3%(Rated power)				
Power Factor	>0.99				
Maximum efficiency	92%				
Output rating voltage	Three-phase 400Vac /220Vac (Customizable)				
Allowed Grid Voltage Range	350~450Vac/180~265Vac				
Output rating Frequency	50Hz/60Hz				
Allowed Grid Frequency Range	48.5~51.5Hz/58.5~61.5Hz				
Automatically put into operation conditions	AC input and power to meet the requirements, the inverter automatically run				
Automatic restart after power failure time	2min (Time is adjustable)				
Dump load	Optional				
Protection	Reverse polarity protection, short circuit protection, island effect, thermal protection, overload protection, etc.				
Communication Interface	RS485/RS232 / Ethernet				
Display mode	Touch screen				
Operating Temperature	-25°C~+55°C				
Relative Humidity	0~95%, No Condensing				
Altitude	≤ 2000 m (over 2000 m with derating required)				
Cooling method	Forced air cooling				
Noise	≤65db				
Protection class	IP20				

W × D × H(mm)	800*650*1900	1000*1000*1900		1800*1000*1900	2200*1000*1900
Weight(kg)	750	850	1200	1800	2200

- **NE-KTL Series (No Isolation Transformer)**

NE-KTL series 10KW/20KW/30KW hanging grid-connected inverter



NE-KTL Series (10KW/20KW/30KW Hanging Grid-Connected Inverter Technical Parameters-DC Input)

Model	NE-10KTL	NE-20KTL	NE-30KTL
Rated power	10KW	20KW	30KW
Max. DC input power	11KW	22KW	33KW
Isolation	Not Have		
Max DC input voltage	700Vdc		
DC input voltage range	200Vdc-700Vdc		
Nominal AC output power	10KW	20KW	30KW

Max. AC input power	11KW	22KW	33KW
THD of AC current	<3%（Rated power）		
Power factor	>0.99		
Max. efficiency	96%		
Output rating voltage	Three-phase 380Vac		
Allowed Grid Voltage Range	350~450Vac		
Output rating Frequency	50HZ/60HZ		
Allowed Grid Frequency Range	48.5~51.5Hz/58.5~61.5Hz		
Internal power consumption an night	<100W		
Automatically put into operation conditions	DC input and power to meet the requirements, the inverter automatically run		
Automatic restart after power failure time	2min		
Protection	Reverse polarity, short circuit, island, overheating and overload etc.		
Display mode	Touch screen		
Wind generator power curve	can set		
Comm. interfaces	RS485/Ethernet		
Operating Temp.	-25℃~+55℃		
Relative humidity	0~90%，No Condensing		
Altitude(m)	2000 meters (over 2000 m with derating required)		
Cooling method	Forced air cooling		
Noise	≤60dB		
Protection degree	IP20(indoor)		
Size(W*L*H)	550*184*770mm		
Weight	50KG		

Remarks:

This grid connected inverter is installed as a hanging type, with DC input and three-phase grid voltage of 380V; If other voltage specifications such as three-phase 220V are required, the following transformer cabinet machine needs to be customized.

NE-KTL Series (Cabinet 150KW-1000KW Optional DC/AC Input, No Isolation Transformer)







Technical parameters of NE-KTL series grid-connected inverter (DC input)

Model	NE-150KTL	NE-200KTL	NE-300KTL	NE-500KTL	NE-1000KTL
Isolation	Not Have				
Rated power	150KW	200KW	300KW	500KW	1000KW
Max. DC input voltage	1100Vdc				
MPPT range	650-1100Vdc				
Max. AC output power	165KW	220KW	330KW	550KW	1100KW
Current harmonics THD	⩽ 3%(Rated power)				
Power Factor	>0.99				
Maximum efficiency	95%				
Output rating voltage	Three-phase 400Vac / 220Vac				
Allowed Grid Voltage Range	350~450Vac/180~265Vac				
Output rating Frequency	50Hz/60Hz				
Allowed Grid Frequency Range	48.5~51.5Hz/58.5~61.5Hz				
Automatically put into operation conditions	DC input and power to meet the requirements, the inverter automatically run				
Automatic restart after power failure time	2min (Time is adjustable)				
Protection	Reverse polarity protection, short circuit protection, island effect, thermal protection,				

	overload protection, etc.				
Communication Interface	RS485/RS232 / Ethernet				
Display mode	Touch screen				
Operating Temperature	-25°C~+55°C				
Relative Humidity	0~95%, No Condensing				
Altitude	≤ 2000 m (over 2000 m with derating required)				
Cooling method	Forced air cooling				
Noise	≤68db				
Protection class	IP20				
W × D × H(mm)	1000*100*1900	1200*1000*1900		1800*1000*2000	
Weight(kg)	500	600	700	800	1000

Technical parameters of NE-KTL series grid-connected inverter (AC input)

Model	NE-150KTL	NE-200KTL	NE-300KTL	NE-500KTL	NE-1000KTL
Isolation	Not Have				
Rated power	150KW	200KW	300KW	500KW	1000KW
Recommended generator rated voltage	AC 600-690V				
Max.AC input voltage	750Vac				
AC input voltage range	450-750Vac				
Max. DC input voltage	1100Vdc				
MPPT range	650-1100Vdc				
Max. AC output power	165KW	220KW	330KW	550KW	1100KW
Current harmonics THD	⩽ 3%(Rated power)				
Power Factor	>0.99				
Maximum efficiency	95%				
Output rating voltage	Three-phase 400Vac /220Vac				
Allowed Grid Voltage Range	350~450Vac/180~265Vac				
Output rating Frequency	50Hz/60Hz				
Allowed Grid	48.5~51.5Hz/58.5~61.5Hz				

Frequency Range					
Automatically put into operation conditions	AC input and power to meet the requirements, the inverter automatically run				
Automatic restart after power failure time	2min (Time is adjustable)				
Dump load	Optional				
Protection	Reverse polarity protection, short circuit protection, island effect, thermal protection, overload protection, etc.				
Communication Interface	RS485/RS232 / Ethernet				
Display mode	Touch screen				
Operating Temperature	-25°C~+55°C				
Relative Humidity	0~95%, No Condensing				
Altitude	≤ 2000 m (over 2000 m with derating required)				
Cooling method	Forced air cooling				
Noise	≤68db				
Protection class	IP20				
W × D × H(mm)	1000*100*1900	1200*1000*1900		1800*1000*2000	
Weight(kg)	550	650	800	900	1100

Note:

Other specifications of power products can be customized.