



# NATILUOS

Unlimited Energy



**PRODUCTS CATALOG**

COMPLETE POWER SOLUTIONS

NU333



NU33100K-YK50  
NU33150K-YK50

NU33200K-YK50  
NU33250K-YK50

NU33300K-YK50  
NU33400K-YK50

NU33500K-YK50  
NU33600K-YK50

# NU33

## YK Modular

YK Modular 100~600KVA

3:3 Phase PF 1.0

### Main Features

- 1 input circuit breaker,
- 1 output circuit breaker,
- 1 bypass circuit breaker,
- 1 maintenance circuit breaker

### Summarization

Our UPS is a kind of three-in- three -out high frequency online UPS, it provides three specifications: The 100~600kVA. The products are modularized and adopt the N+X redundancy.

It can flexibly increase the number of the UPS modules according to the load capacity which is convenient for flexible allocation and gradually investment.

The UPS can solve most of the power supply problems, such as blackout, over-voltage, under-voltage, voltage sudden drop, oscillating of decreasing extent, high voltage pulse, voltage fluctuation, surge, inrush current, harmonic distortion (THD), noise interference, frequency fluctuation, etc..

This UPS can be applied to different applications from computer device, automatic equipment, communication system to industry equipment

### Functions and Features

- Digital control
- 19-inch standard cabinet 1.2-meter, 1.6-meter and 2-meter high cabinets are provided according to the user's requirement.
- Modularized design
- High power-density design The height of the single module is 3U.

- N+X parallel redundancy

This series UPS adopts N+X parallel redundancy design, user can set different redundancy according to the importance of the load.

While the redundancy modules are set more than two, the availability of UPS system will achieve 99.999%, which may satisfy the required reliability of the critical load connected.

Through LCD display setting, you may configure the required quantity of the redundancy unit. When the load connected is over the number of the redundancy, the UPS will alert right away. The design of the MTBF (Meantime before Failure) is up to 250,000 hours.

This series can set the number of redundancy modules.

When the load exceeds the redundancy setting, the UPS can still work normally and simultaneously send out corresponding warning as long as the load doesn't exceed the total capacity of modules.

- Parallel redundant control system
- Optimizing distributed convergence for the cabinet
- Centralized bypass
- Common Battery
- Automatic charge current adjustment according to battery capacity connected.
- 3-Stage intelligent charging
- Touch-screen Super-large LCD display
- Remote monitoring via SNMP
- Optional Accessories available such as Isolation transformer, distribution Panel, SNMP Card, Relay Contact Board, etc...
- Equip with Maintenance Bypass Switch for easy maintenance purpose.
- Superior MTTR (Meantime to repair) & Short shutdown time in maintenance
- Centralized monitoring module is also available
- EPO and REPO function



# SPECIFICATIONS

Model		NU33100K-YK50	NU33150K-YK50	NU33200K-YK50	NU33250K-YK50	
<b>Cabinet capacity (VA/W)</b>		50k~100k 50k~100k	50k~150k 50k~150k	50k~200k 50k~200k	50k~250k 50k~250k	
<b>Module capacity (VA/W)</b>		50k / 50k				
<b>Max. module number</b>		2+1	3	4	5	
<b>Input</b>	Phase	3 Phase 4 Wires and Ground				
	Rated Voltage	380/400/415Vac				
	Voltage Range	138~485Vac ◆ At 40°C: The UPS works at full load when the voltage is 323~485Vac and is derated load when the voltage is 323~138Vac ◆ At 30°C: The UPS works at full load when the voltage is 305~485Vac and is derated load when the voltage is 305~138Vac				
	Frequency Range	40Hz-70Hz				
	Power Factor	≥0.99				
	Current THDi	≤3%(100% nonlinear load)				
	Bypass Voltage Range	Max. voltage: 220V:+25 % ( optional +10%, +15%, +20%); 230V:+20 % ( optional +10%, +15%); 240V:+15 % ( optional +10%); Min. voltage:-45 % ( optional -10%, -20%,-30%) Frequency protection range: ±10%				
	<b>Output</b>	Phase	3 Phase 4 Wires and Ground			
Rated Voltage		380/400/415Vac				
Power Factor		1				
Voltage Regulation		±1%				
Frequency		Utility Mode	±1%/±2%/±4%/±5%/±10% of the rated frequency(optional)			
		Battery Mode	(50/60±0.1)Hz			
Crest Factor		3:1				
THD		≤2% with linear load ≤4% with non linear load				
Overload	Inverter overload capability: ◆ 105% < load ≤ 110%: transfer to bypass mode after 60 min ◆ 110% < load ≤ 125%: transfer to bypass mode after 10 min ◆ 125% < load ≤ 150%: transfer to bypass mode after 1 min Bypass overload capability: ◆ Temperature ≤ 30°C, load ≤ 135%: run for a long time ◆ Temperature ≤ 40°C, load ≤ 125%: run for a long time ◆ 100% load: run for 100 ms					
<b>Battery</b>	Voltage	Optional Voltage: ±180V/192V/±204V/±216V/±228V/±240/±252/±264/±276/±288/±300Vdc(30/32/34/36/38/40/42/44/46/48/50pcs optional) 360Vdc~600Vdc (30~50 pcs, 36 pcs define, 36 and 50 pcs no power derating; 32~34 pcs output power factor 0.9;30 pcs output power factor 0.8;)				



	Module charge current (A) max.	20A		
<b>Transfer Time</b>		Utility to Battery : 0ms; Utility to bypass: 0ms		
<b>Protection</b>	Short Circuit	Hold Whole System		
	Overheat	Line Mode: Switch to Bypass; Backup Mode: Shut down UPS immediately		
	Battery Low	Alarm and Switch off		
	Self-diagnostics	Upon Power On and Software Control		
	EPO	Shut down UPS immediately		
	Battery	Advanced Battery Management		
	Noise Suppression	Complies with EN62040-2		
<b>Communication Interface</b>		CAN, RS232, RS485, LBS, Parallel, Relay card, SNMP card(optional)		
<b>Environment</b>	Operating Temperature	0 40		
	Storage Temperature	-25 55		
	Humidity	0 95% non condensing		
	Altitude	< 1500m		
<b>Display</b>	Audible & Visual	Line Failure, Battery Low, Overload, System Fault		
	Status LED	UPS Fault, Alarm and normal		
	Reading On the LCD	Input Voltage, Input Frequency, Output Voltage, Output Frequency, Load Percentage, Battery Voltage, parameter set, history record...		
<b>Other</b>	Standard cabinet Dimensions(W*D*H)	/		
	Full cabinet Dimensions(W*D*H) (mm)	600*850*1200	600*850*1600 600*850*2000	600*850*1600 600*850*2000
	Module Dimensions(W*D*H) (mm)	440*620*130		
	Cabinet Weight (Kg)	180	200/230	230/260
	Module Weight (Kg)	34		
<b>Safety Conformance</b>		CE,EN/IEC 62040-3,EN/IEC 62040-1-1		

Model	NU33300K-YK50	NU33400K-YK50	NU33500K-YK50	NU33600K-YK50
<b>Cabinet capacity (VA/W)</b>	50k~300k / 50k~300k	50k~400k / 50k~400k	50k~500k / 50k~500k	50k~600k / 50k~600k
<b>Module capacity (VA/W)</b>	50k / 50k			
<b>Max. module number</b>	6	8	10	12
<b>Input</b>	Phase	3 Phase 4 Wires and Ground		
	Rated Voltage	380/400/415Vac		
	Voltage Range	138~485Vac At 40°C: The UPS works at full load when the voltage is 323~485Vac and is derated load when the voltage is 323~138Vac At 30°C: The UPS works at full load when the voltage is 305~485Vac and is derated load when the voltage is 305~138Vac		



	Frequency Range	40Hz-70Hz	
	Power Factor	≥0.99	
	Current THDi	≤3%(100% nonlinear load)	
	Bypass Voltage Range	Max.voltage: 220V:+25 %( optional +10%, +15%, +20%); 230V:+20 %( optional +10%, +15%); 240V:+15 %( optional +10%); Min. voltage:-45 %( optional -10%, -20%,-30%) Frequency protection range: ±10%	
<b>Output</b>	Phase	3 Phase 4 Wires and Ground	
	Rated Voltage	380/400/415Vac	
	Power Factor	1	
	Voltage Regulation	±1%	
	Frequency	Utility Mode	±1%/±2%/±4%/±5%/±10%of the rated frequency(optional)
		Battery Mode	(50/60±0.1)Hz
	Crest Factor	3:1	
	THD	≤2% with linear load ≤4% with non linear load	
Overload	Inverter overload capability: 105% < load ≤ 110%: transfer to bypass mode after 60 min 110% < load ≤ 125%: transfer to bypass mode after 10 min 125% < load ≤ 150%: transfer to bypass mode after 1 min Bypass overload capability: Temperature ≤ 30°C, load ≤ 135%: run for a long time Temperature ≤ 40°C, load ≤ 125%: run for a long time 1000% load: run for 100 ms		
<b>Battery</b>	Voltage	Optional Voltage: ±180V/192V/±204V/±216V/±228V/±240/±252/±264/±276/±288/±300Vdc(30/32/34/36/38/40/42/44/46/48/50pcs optional) 360Vdc~600Vdc (30~50 pcs, 36 pcs define, 36 and 50 pcs no power derating; 32~34 pcs output power factor 0.9;30 pcs output power factor 0.8;)	
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<b>Protection</b>	Short Circuit	Hold Whole System	
	Overheat	Line Mode: Switch to Bypass; Backup Mode: Shut down UPS immediately	
	Battery Low	Alarm and Switch off	
	Self-diagnostics	Upon Power On and Software Control	
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	Battery	Advanced Battery Management	
	Noise Suppression	Complies with EN62040-2	
<b>Communication Interface</b>		CAN, RS232, RS485, LBS, Parallel, Relay card, SNMP card(optional)	
<b>Environment</b>	Operating Temperature	0 40	



	Storage Temperature	-25 55			
	Humidity	0 95% non condensing			
	Altitude	< 1500m			
<b>Display</b>	Audible & Visual	Line Failure, Battery Low, Overload, System Fault			
	Status LED	UPS Fault, Alarm and normal			
	Reading On the LCD	Input Voltage, Input Frequency, Output Voltage, Output Frequency, Load Percentage, Battery Voltage, parameter set, history record...			
<b>Other</b>	Standard cabinet Dimensions(W*D*H)		600*850*2000		
	Full cabinet Dimensions(W*D*H) (mm)	600*850*2000	1200*850*2000	1200*850*2000	
	Module Dimensions(W*D*H) (mm)	440*620*130			
	Cabinet Weight (Kg)	260	280/450	480	550
	Module Weight (Kg)	34			
<b>Safety Conformance</b>		CE,EN/IEC 62040-3,EN/IEC 62040-1-1			



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