Modular UPS - Version 2.0

ULTRA-POWER SERIES 100-600kVA Double Conversion Modular UPS



The UPS system is designed with modular architecture, where each module operates independently and contains its own components, including power converters, inverters, and battery systems. This flexible, scalable design allows for seamless expansion and customized power protection, ensuring continuous operation based on specific need.



General Features

- High reliability
- Hot-swappable power modules and bypass modules.
- 3-level topology design, efficiency is up to 96%.
- High input power factor, it is up to 0.99
- THDi<3% (100% linear load).
- Support parallel expanded operation: maximum is 8 units.
- Batteries number of each group can be selected from 30 pieces to 50 pieces
- Output power factor is 1.0, UPS can supply power to 100% unbalanced load.
- High adaptability for load, it can connect full inductive load or capacitive load.
- With 7 inches (standard) and 10 inches (optional) colorful touch LCD screen
- Support SNMP, RS232, RS485, Dry contact interface.

SPECIFICATIONS

PARAMETE	RS							
Cabinet	Cabinet capacity kVA		200kVA	300kVA	400kVA	500kVA	600kVA	
	Module capacity kW		50kW					
	Max. module number		4	6	8	10	12	
Input	Nominal voltage	380/400/415Vac, (3Ph+N+PE)						
	Operating voltage range		138~305Vac for 40% load; 305~485Vac for 100% load					
	Operating frequency range		40Hz~70Hz					
	Power factor		>0.99					
	Harmonic distortion (THDi)		≤3% (100% linear 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%, -15%, -20%, -30%)					
	Bypass frequency tracking range		±10%					
	Power walk in		Support					
	Generator input		Support					
	Rated voltage		380/400/415Vac, (3Ph+N+PE)					
Output	Power Factor		1					
	Voltage regulation		±1%					
	Output frequency	Line mode	Synchronize with input, when the input frequency >±1@%%/±2%/±4%/±5% optional), output 50/60 (±0.1Hz)					
		Batt. mode	(50/60±0.1%)Hz					
	Crest factor		3:1					
	Harmonic distortion(THDv)		≤1% with linear load; ≤3% with nonlinear load					
	Efficiency		Up to 96%					
Battery	Battery voltage	VRLA Battery	360Vdc~600Vdc (30~50 pcs, 36 pcs default, 36~50 pcs no power derating; 32~34 pcs output pc factor 0.9; 30 pcs output power factor 0.8)				32~34 pcs output powe	
	Power module charge current		20A (Max.)					

www.nordencommunication.com

Modular UPS - Version 2.0 **1**

Co **(**

ULTRA-POWER SERIES 100-600kVA Double Conversion Modular UPS



System	Transfer time		Utility to Battery : Oms; Utility to Bypass : Oms					
Features	Overload	Inverter mode	≤110% 60min, ≤125% 10min, ≤150% 1min, >150% 1.2s shut down inverter					
	Overload	Bypass mode	30°C: 135% for long term; 40°C: 125% for long term; > 1000%, 100ms					
	Overheat		Line Mode: Switch to Bypass; Backup Mode: Shut down UPS immediately					
	Low battery voltage		Alarm and Switch off					
	Self-diagnostics		Upon Power On and Software Control					
	Backfeed protection		Support					
	Battery		Advanced Battery Management					
	Noise suppression		Complies with EN62040-3					
	Audible&visual alarm		Line Failure, Battery Low, Overload, System Fault					
	Status LED & LCD display		Line Mode, Bypass Mode, Battery Low, Battery Fault, Overload & UPS Fault					
	Reading on the LCD display		Input, Output, Battery, Command, Setting, Maintenance					
	Communication Interface		Rs232, RS485, Parallel, LBS, BMS, Dry contact port, Relay card(optional), SNMP card(optional), Battery temperature sensor(optional)					
nvironment	Operating temperature		0℃~40℃					
	Storage temperature		-25℃~55℃					
	Humidity range		0∼95% (non condensing)					
	Altitude		<1500m, derating required when >1500m					
	Noise level		<73dB					
	IP Rating		IP 20					
Physical	Dimension WxDxH (mm)	UPS cabinet(S/F)	600×850×2000	600×850×2000	600×850×2000	1200×850×2000	1200×850×2000	
		Power Module	440×620×130					
	Net Weight (kg)	UPS cabinet	240	260	290	480	540	
		Power Module	34					
Standards	Safety		CE; IEC/EN62040-1, IEC/EN62477-1					
	EMC		IEC/EN62040-2 (IEC61000-2-2, IEC61000-4-2, IEC61000-4-3, IEC61000-4-4, IEC61000-4-5, IEC61000-4-11)					

^{*}Product specifications and appearances are subject to change without prior notice.

ORDERING GUIDE

Modular UPS Series	Cabinet Types Section for 50 KW Power Module Supporting type cabinet	Power Module Section for 50kW Power Module
NMLU	100: 100kVA (Max. 2 Module) 150: 150kVA (Max. 3 Module) 200: 200kVA (Max. 4 Module) 300: 300kVA (Max. 6 Module) 400: 400kVA (Max. 8 Module) 500: 500kVA (Max. 10 Module) 600: 600kVA (Max. 12 Module)	01: 01 02: 02 03: 03 04: 04 05: 05 06: 06 07: 07 08: 08 09: 09 10: 10 11:11

Part no: & description (for example)

Part Number	Description			
NMLU-10001	Modular UPS 100kVA Cabinet with 1 pcs of 50kW power module			
NMLU-40005	Modular UPS 400kVA Cabinet with 5pcs of 50kW power module			
NMLU- 60010	Modular UPS 600kVA Cabinet with 10pcs of 50kW power module			