

Norden's Ultra power series 160-200 kVA UPS is an online double conversion UPS that has three-phase in both input and output and a unity output power factor. This features a maximum parallel expanded operation of up to 6 units and has an inverter efficiency upto 96% makes it suitable for data center applications.



### General Features

- Wide input voltage range 140~485Vac (Phase voltage 80~280Vac)
- High input power factor, can be up to 0.99
- Three-level inverter topology, the efficiency can be up to 96%
- Support parallel expanded operation: maximum is 6 units
- Input current harmonic:<3%
- Large charging current
- High adaptability for the load it can connect full inductive load or capacitive load
- Power Walk in function, it can reduce the star current impact to the system and reduce the capacity of the generator
- Optimized battery group, the quantity of battery:30-50pcs
- LBS function can realize 2 independent UPS systems work in synchronization enhancing the reliability of the system
- The output factor is 1, and can be meet 100% unbalanced load
- Support USB,RS485,RS232,SNMP,dry contact card

### SPECIFICATIONS

MODEL		CN933160U / CN933160U-5L	CN933180U / CN933180U-5L	CN933200U / CN933200U-5L
Capacity	kVA	160	180	200
	kW	160	180	200
Input	Normal Voltage	380/400/415Vac (3Ph+N+PE)		
	Operating voltage range	138~305Vac for 40% Load; 305~485Vac for Full Load		
	Harmonic distortion(THDi)	<3%(100% linear load)		
	Operating frequency range	40~70Hz		
	Power factor	≥0.99		
	Bypass voltage range	220Vac Max.Voltage:+25% (optional +10%,+15%,+20%) 230Vac Max.Voltage:+20%(optional +10%,+15%) 240Vac Max.Voltage:+15%(optional +10%) Min.Voltage:-45%(optional -15%,-20%,-30%)		
	Bypass Frequency range	Frequency synchronize tracing range:±10%		
	Generator input	Yes		
Output	Rated voltage	380/400/415Vac (3Ph+N+PE)		
	Power factor	1		
	Voltage regulation	±1%		
	Frequency	±1%/±2%/±4%/±5%/±10% of the rated frequency (Optional)		
		50/60(±0.2%)Hz		
	Crest factor	3:1		
	Harmonic distortion (THDv)	≤2% with linear load, ≤4% with non-linear load		
	Efficiency	95.5%		
Battery	Output Waveform	Pure Sine Wave		
	Battery voltage	±180/±192/±204/±216/±228/±240/±252/±264/±276/±288/±300Vdc(30/32/34/36/38/40/42/44/46/48/50pcs)		
	Charging current (Charging current can be set according to the battery capacity installed)	60A		

MODEL		CN933160U / CN933160U-5L	CN933180U / CN933180U-5L	CN933200U / CN933200U-5L
System Features	Transfer time	Mains to battery:0ms; Inverter to bypass:0ms		
	Overload	Line mode	≤110%: Overload 60min, ≤150%: Overload 1min, >150% 1.2s turn to bypass mode immediately	
		Bypass mode	30°C: 135% Overload long term; 40°C: 125% Overload long term >1000%, 100ms	
	Backfeed Protection		Yes	
	Alarm		Overload, utility abnormal, UPS fault, battery low, etc	
	Protection		Short circuit, overload, over-temperature, battery low, fan fault alarm	
	Remote LCD		Yes	
Environment	Communication		USB, RS232, RS485, Parallel port,dry contact, Intelligent slot, LBS, SNMP card (optional), Relay card (optional)	
	Operating temperature		0~40°C	
	Storage temperature		-25~55°C	
	Humidity range		0~95% (Non-condensing)	
	Altitude		<1500m	
	Noise level		<63dB	<66dB
Physical	IP Rating		IP 20	
	Dimension W x D x H (mm)		442x850x1200	
	Net Weight (kg)		200	280
Standards	Safety		CE; IEC/EN62040-1,IEC/EN62477-1	
	EMC		IEC/EN 62040-2 (IEC 61000-2-2, IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5, IEC 61000-4-6, IEC 61000-4-8, IEC61000-4-11)	

\*Product specifications and appearances are subject to change without prior notice.

### ORDERING INFORMATION

Part Number	Description
CN933160U	160kVA Double Conversion Tower Type 3/3 UPS (External Battery)
CN933160U-5L	160kVA Double Conversion Tower Type 3/3 UPS with 5inch LCD display (External Battery)
CN933180U	180kVA Double Conversion Tower Type 3/3 UPS (External Battery)
CN933180U-5L	180kVA Double Conversion Tower Type 3/3 UPS with 5inch LCD display (External Battery)
CN933200U	200kVA Double Conversion Tower Type 3/3 UPS (External Battery)
CN933200U-5L	200kVA Double Conversion Tower Type 3/3 UPS with 5inch LCD display (External Battery)

### COMPATIBLE ACCESSORIES

Part Number	Description
CNS01	SNMP Card