# Maxpower Series - Version 1.0

# NORDEN®

## **MAX-POWER SERIES** 20kVA Online Transformerless UPS

Norden's Maxpower Series 20 kVA UPS is an online double conversion UPS that features a single phase in both input and output, and an output power factor of 0.9. This UPS has a flexible battery configuration and redundant design for increased availability.



### **General Features**

- Online double conversion with DSP control
- Wide input range:208~478Vac
- Wide input frequency range:40~70Hz
- Support parallel function(Optional)
- Optimization battery group, the quantity of battery:16/18/20pcs
- Support 3/1 and 1/1 operation
- Maximum charging current up to 16A(Settable)
- ECO mode operation for energy saving
- Cold start
- Intelligent fan speed regulation
- Self-testing when UPS start-up

### **SPECIFICATIONS**

MODEL	DEL		CN7320MP
Capacity	VA		20000
	Watts		18000
Input	Normal Voltage		380/400/415Vac; (3Ph+N+PE), 220/230/240Vac (L+N+PE)
	Operating voltage range		208~478Vac, 120~276Vac
	Operating frequency range		40~70Hz (50/60Hz Auto-Sensing)
	Power factor		≥0.99
	Bypass voltage range		Max.voltage: 220V: +25%(optional +10%,+15%,+20%) 230V: +20% (optional +10%,+15%) 240V: +15% (optional +10%) Min.voltage: -45% (optional -20%,-30%)
	Bypass frequency range		Frequency protection range:±10%
	Generator input		Yes
Output	Rated voltage		220/230/240Vac
	Power factor		0.9
	Voltage regulation		±1%
	Frequency	Line mode	$\pm 1\%/\pm 2\%/\pm 4\%/\pm 5\%/\pm 10\%$ of the rated frequency(optional)
		Bat. mode	50/60(±0.1)Hz
	Crest factor		3:1
	Harmonic distortion (THDv)		≤2% with linear load, ≤5% with non-linear load
	Efficiency		>94%
Battery	Battery voltage		192/216/240Vdc
	Capacity (Standard unit)		12V/7Ah/9Ah
	Typical recharging time		6~8 hours (to 90% of full capacity)
	Charging current		2.7A (standard unit); Max.current 18A(Long run unit)

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MODEL			CN7320MP
System Features	Transfer time		Mains to battery:0ms; Mains to bypass:0ms
	Overload	Line mode	Load≤110%: last 60min, ≤125%: last 10min, ≤150%: last 1min, >150% turn to bypass mode immediately
		Bypass mode	125A(Breaker)
	Short circuit		Hold whole system
	Overheat		Line mode: Turn to bypass; Backup mode: shut down UPS immediately
	Battery low		Alarm and switch off
	Self-diagnostics		Upon power on and software control
	Battery		Advanced battery management
	Audible & Visual alarms		Line failure, Battery under voltage, Overload, System fault
	LED & LCD display		Line mode, Bat. mode, Eco mode, Bypass mode, Battery under voltage, Overload & UPS fault
	LCD display		Input voltage, Input frequency, Output voltage, Output frequency, Load percentage, Battery voltage, Inner temperature & Remaining battery backup time
	Communication interface		RS232, USB, SNMP card (optional), Parallel board (optional), Relay card (optional)
Environment	Operating temperature		0~40°C
	Storage temperature		-25~55°C
	Humidity range		0~95% (Non-condensing)
	Altitude		<1500m
	Noise level		<58dB at 1 Meter
Physical	Dimension W x D x H (mm)		E: 220 x 531 x 450 ; l:250 x 900 x 868
	Net Weight (kg)		28/171

<sup>\*</sup>Specifications are subject to change without prior notice.

STANDARDS			
	Safety	IEC/EN62040-1, IEC/EN60950-1	
	EMC	IEC/EN62040-2, IEC61000-4-2, IEC61000-4-3, IEC61000-4-4, IEC61000-4-5, IEC61000-4-6, IEC61000-4-8	

### **ORDERING INFORMATION**

Part Number	Description	
CN7320MP	20kVA Double Conversion Transformer-less 3/1 UPS (External Battery)	

### **COMPATIBLE ACCESSORIES**

Part Number	Description			
CNS01	SNMP Card for 10-80kVA 3/1 and 3/3			