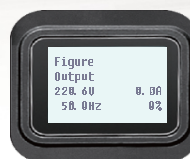
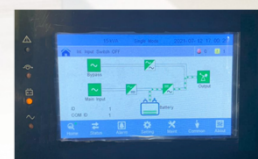


Crystal Series

CL10000-CL20000
10~20kVA, 3:1 phase PF 0.8



Control Panel



LCD Touch Screen

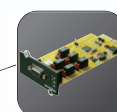
The Crystal Series Double Conversion true online Series, featured with DSP-controlled technology, superior input Voltage window for energy ECO mode, parallel capability (for 10KVA, 20KVA 3/1), smart fan speed control, optional powerful charger, is an ideal solution to your computer center, network center, communication system, automatic control system or other critical system.

Features

- N+X parallel redundancy
- Online double conversion with DSP control
- Input current harmonic: <5%
- Optimization battery group, the quantity of battery: 16/18/20 pieces (optional)
- High output power factor at 0.8PF
- Wide input voltage range: 208~478Vac
- Wide input frequency range (50Hz: 45~55Hz / 60Hz: 54~66Hz)
- Support generator input
- Support economic (ECO) operation mode
- Self-testing when UPS startup
- Options: SNMP card/Relay card/ Parallel card
- Cold start



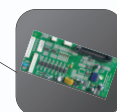
Rear Panel



Relay card



SNMP



Parallel board



Technical Specifications:

MODEL		CL10000	CL15000	CL20000
Capacity		10KVA/9KW	15KVA/13.5KW	20KVA/18KW
INPUT				
Nominal voltage		380/400/415Vac;(3Ph+N+PE)		
Operating voltage range		208 ~ 478Vac		
Operating frequency range		50Hz:45~55Hz;60Hz:54~66Hz(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%		
ECO range		Same as the bypass		
Harmonic distortion (THDi)		<5%(100% linear load)		
Generator input		Support		
OUTPUT				
Rated voltage		220/230/240Vac		
Power factor		0.8/0.9(optional)		
Voltage regulation		± 1%		
Frequency	Line Mode	± 1%/ ± 2%/ ± 4%/ ± 5%/ ± 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		>92%	>93.5%	
BATTERY				
Battery voltage		± 96/108/120Vdc (optional)		
Capacity (standard unit)		12V/7Ah/9Ah		
Typical recharge time		6~8 hours (to 90% of full capacity)		
Charge current		1A(10kVA Standard unit) ; Max.current 10A(Long run unit)		
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	63A(Breaker)	100A(Breaker)	125A(Breaker)
Short circuit		Hold Whole System		
Overheat		Line Mode: Turn to Bypass; Bat. Mode: Shut down UPS immediately		
Low battery voltage		Alarm and Switch off		
Self-diagnostics		Upon Power On and Software Control		
Battery		Advanced Battery Management		
Audible & Visual alarms		Line Failure, Battery Low, Overload, System Fault		
LED & LCD display		Line Mode, Bat. Mode, Eco Mode, Bypass Mode, Battery Low, 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)		
ENVIRONMENTAL				
Operating temperature		0℃ ~ 40℃		
Storage temperature		-25℃ ~ 55℃		
Humidity range		0 ~ 95% (non-condensing)		
Altitude		<1500m		
Noise level		<55dB	<58dB	
PHYSICAL				
Dimension D × W × H (mm)		597 × 250 × 655(S)/502 × 250 × 616(H)	502 × 250 × 616	
Net weight (kg)		76(S)/35 (H)	45	46
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		

Specifications are subject to change without prior notice.

