

Sinus LCD Series

Uninterruptible Power Systems

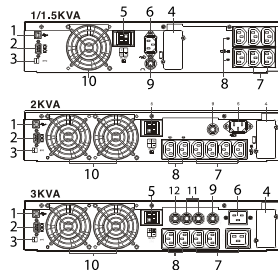
On-Line "Double Conversion" Technology

1 phase in-1 phase out, 1kVA to 3kVA (Tower & Rack Convertible)



- On-line 'double conversion' technology
- Real Digital Signal Processor (DSP) Controller
- Power factor correction
- User friendly LCD display
- Programmable Receptacles
- Wide input voltage range and frequency
- Smart communication port and SNMP management capability
- Hot Swappable Battery
- Emergency shutdown control through EPO
- Overload & short circuit protection
- Powerful Built-in Charger
- Extended back up time with battery cabinet
- Cold start (DC power on)
- Genius battery management (GBM)
- RS232, USB and SNMP can be activated simultaneously
- Compact size, light weight & low noise

Rear Panel Views



- 1.USB Port
2. RS232 Port
- 3.Emergency Power Off (EPO) Dry Contact Signal inputs
- 4.Communication Card Options Slot
- 5.External Battery Connector
- 6.AC power connection socket
- 7.AC Outlets
- 8.Two programmable outlets
- 9.Utility Input circuit breaker
- 10.Cooling Fans
- 11.Output circuit breaker for two outlets
- 12.Output circuit breaker for two programmable outlets

Accessories

Communication

- Internal SNMP Slot Card
- External SNMP Adapter
SNMP Adapter Net Agent Mini DP522
SNMP Adapter CS121BL
- USB Board
- Dry Contact Board

Battery Cabinets

- BC 2000-sinus, RMBC 2000-sinus
- BC 3000-sinus, RMBC 3000-sinus

Other

- 200W Additional charger card for 1,2&3kva
- 500W Additional charger card for 2&3kva
- Rail Kit
- External Manual Bypass Switch
MTBS-SS123
- External Battery Connection Cable

*Communication Port and Software are standard.

Package Content

- User Manual
- RS232 Communication Cable
- RJ11 Phone Cable
- Power Cable for 1000VA and 3000VA
- Fixed power cable for 2000VA on the ups
- 1 piece IEC Cable for 1000VA
- 2 pieces IEC Cable for 2000VA & 3000VA
- UPSMAN Software
- Accessories for Rack Tower Applications

Sinus LCD Specifications

MODEL	SS LCD 210	SS LCD 220	SS LCD 230
INPUT			
Power(kVA)	1	2	3
Voltage	160 VAC - 288 VAC		
Frequency	50/60 Hz $\pm 5\%$ (Auto Sensing)		
Power Factor	$>0,99$		
OUTPUT			
Power Factor	0,8		
Voltage	220VAC / 230 / 240VAC		
Voltage Regulation	$\pm 1\%$		
Frequency	50/60 Hz (Auto Detection)		
Frequency Regulation	$\pm 0,1\%$		
Harmonic Distortion	$<3\%$		
Crest Factor	3:1		
Overload Capacity	100%-120% for 30 Seconds, 120%-150% For 10 Seconds		
Whole Efficiency	$>85\%$		$>88\%$
Inverter Efficiency	$>90\%$		
Transfer Time	0ms		
BATTERY			
Battery Type	Maintenance - Free Lead Acid Batteries		
DC Voltage	36V	72V	
Internal Battery	3pcs 12V 7Ah	6pcs 12V 7Ah	6pcs 12V 9Ah
Back Up Time	Full Load	7 min.	5 min.
	Half Load	20 min.	15 min.
Recharge Time	3 Hours (to 90% Of Full Capacity)		
DISPLAY			
LCD Panel	Input / Output Voltage And Frequency Values, Load %, Battery Voltage, Internal Temperature		
LED Indicators	Utility Or By Pass, Battery Low, Battery Abnormal, Overload, Site Wiring Fault, Service Mode, Ups Off, Ups Abnormal Indicators		
ALARMS			
	Line Failure, Battery Low, Over Load, Failure Events		
PROTECTIONS			
	Short Circuit, Over Temperature, Overload, High Voltage, Battery Low, EPO		
COMMUNICATION			
Interface (Communication Ports)	RS232 and USB		
Slots	Relay Contact Board, SNMP / WEB Card		
ENVIRONMENT			
Temparature	0°C - 40°C		
Humidity	0% - 90%		
Noise Level (1m Distance)	$<50\text{dBA}$ (At 1 Meter)		
Protection Class	IP 20		
PHYSICAL			
Outlets	6pcs IEC	6pcs IEC	4pcs IEC
Dimensions (mm) WxDxH	440x88x405	440x88x650	440x88x650
Net Weight (kg)	16	29,5	30
STANDARDS			
Standards	EN 62040-1-1 (Safety), EN 62040-2(EMC)		



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