9. 30KVA Online UPS with 1 Hr Backup

Features	Technical Specification	Bidders Response (Yes/NO)	Remarks
Technology	**True On line Double conversion IGBT based Rectifier and IGBT based Inverter.**		
	Input & output EMI Filter to be provided		
	Galvanic Isolation Transformers should be provided for both Bypass Supply and input supply independently.		
Input			
Rated voltage	400 VAC three-phase + N		
Voltage Range	± 20%		
Frequency Range	45 - 65 Hz		
Power Factor	> 0.9		
Harmonic Distortion	<5%		
By-Pass			
Static Bypass switch	A Build in static transfer switch shall be provided as integral part of the UPS		
Rated Voltage	400 VAC		
Number of Phases	3 + N		
Permitted voltage range	± 15% (selectable from ± 10% to ± 25% from front panel)		
Rated Frequency	50Hz		
Permitted Frequency Range	± 2% (selectable from ± 1% to ± 5% from front panel)		
Transfer Time	0 ms		
Batteries			
Type	Sealed Maintenance Free VRLA		
Backup Time	60 mins.		
Battery Make	Exide Power Safe		
DC Bus Voltage	384 V or more		
Total VAH	38000VAH or more on each UPS		
Recharge Time	4-8 Hrs.		
Temperature Control & Battery Charging	The system should compensate for any variations in temperature while recharging the batteries. The recharge voltage should be temperature depended		
Automatic Battery Test	The UPS should carry out battery tests automatically.		
Output			
Active Power	Should be 24 KW (30 KVA)		
Number of Phases	3 + N		
Rated Voltage	380 – 400 – 415 (selectable)		
Crest Factor (Ipeak/Irms)	3 : 1		
Waveform	Sinewave		
Static stability	± 1%		
Dynamic Stability	± 5% in 5 ms		
Frequency	50/60 Hz selectable		
Overload	110% for 5 Hrs., 125% for 10 mins., 150% for 1 min.		
Protection			
Back Feed Protection	The back feed protection should be installed in series with bypass SCRs.		
Normal Protection	Input, output, rectifier input, battery fuse, bypass fuse, short circuit etc. Thermal on system, rectifier, bypass and inverter. Protection against profound battery discharge		
Environment			
Dimension (HWD)	**Indicative UPS dimensions should be - 1500 mm x 700 mm x 900 mm**		
Operating Temp.	0 – 40º C		
Relative Humidity	<95% non condensing		

Noise	≤60dBA at 1 m		
Protection Rating	IP 20		
Display and Software			
List of the information output on the LCD Display	Input Voltage		
	Input Frequency		
	Input Power		
	By-pass Voltage		
	By-pass Frequency		
	Output Voltage		
	Output Frequency		
	Output Power		
	Output Peak Power		
	Battery Voltage		
	Battery Peak Pulse Current		
	Battery discharge current		
	Inverter Input Voltage		
	Internal temperature (system / converter / Bypass/ Inverter/ magnetic Components)		
	Inverter Operation Time		
	By-pass operation time		
	Battery Operation Time		
	No. of battery interventions		
	No. of complete discharges		
	Date of first activation		
Commands	Battery Test		
	Display Contrast		
	By-pass Off		
	End discharge pre-alarm		
	System Off		
Customisation	Output Voltage		
	Output Voltage Compensation		
	Batteries		
	Line – interactive operating mode		
	End discharge pre-alarm		
	Auto off		
	By-pass voltage tolerance		
	By-pass frequency tolerance		
	Modem		
Efficiency			
Inverter Efficiency	95% or better		
AC/AC Efficiency	91% or better		
Other Important Points			
Reliability of the System	The total system (Charger & Inverter section) should be controlled by redundant microprocessor system. If a fault should occur to either of the microprocessors, the power supply to the protected load should not be interrupted		
Self Diagnostics	Event log with minimum 125 messages, measurements & alarms should be available from the front LCD		
Auto Restart Facility	The UPS should be configured to automatically restart after a mains supply failure or after the batteries have become fully discharged		
Standards	The system should comply the following safety & International standards: EN 62040-1, EN 62040-2 & EN 62040-3 ISO-14001, EN 50091-2,EN,IEC 61000-3-2,IEC 61000-3-3.		
Certification	**ISO 9001, ISO14001**		
Remote Management	SNMP card required for remote management.		