

बीरबल साहनी पुराविज्ञान संस्थान, लखनऊ
BIRBAL SAHNI INSTITUTE OF PALAEOSCIENCES, LUCKNOW

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लखनऊ-226007

बी सा पु सं/III/भंडार एवं क्य/T.B. /C-807

Date: 04.11.2019

संयोजक वेबसाइट समिति,
बी सा पु सं, लखनऊ।

10 KVA Online UPS with 30 min backup time-01 (Specifications at the back)

Subject: -----

Dear Sirs,

This Institute intend to purchase item mentioned above. Sealed quotations are invited so as to reach this office on or before 5:00 P.M. on 22.11.2019 duly superscribed by **"10 KVA Online UPS with 30 min backup time"**.

While submitting quotation please note that:

1. The material may either of indigenous manufacturer or of foreign make, available from ready stock. Any offer to supply on forward Delivery Basis under suppliers own quota license will also be considered.
2. The price quoted should be F.O.R. Destination.
3. Your rates should include packing, insurance and forwarding charges.
4. The rates of GST should be clearly indicated wherever chargeable. The tendered should also indicate GST Registration Number and date in this quotation.
5. Specific mention should be made whether the offer is for supplies available ex-stock. In case the offer is on Forward Delivery basis, firm delivery period must be indicated.
6. The cover should be sealed and superscribed "Quotation for **"10 KVA Online UPS with 30 min backup time"**" must be written on envelope. The quotations not complying the procedure will be rejected.
7. Payments will be made by crossed cheque on The Indian Overseas Bank, Lucknow only after receipt and acceptance of supply and installation/ if required satisfactory.
8. The acceptance of the quotation will rest with the Director who does not bind himself to accept the lowest quotation and reserves the right to himself to reject or partially accept any or all the quotation received without assigning any reasons.
9. The quotations are liable to be cancelled if any of the above mentioned conditions are not complied with.
10. The items may be increase or decrease at the time of purchase.



(Hari Lal)
Section Officer
Store & Purchase Section

Specifications of 10 KVA Online UPS with 30 min backup time for similar level or better

Input:

Rectifier Design
Normal Voltage
Nominal Frequency

IGBT charger - Advanced rectifier
415 V AC (-20% to +15%) 3 Ph & N
50 Hz ($\pm 6\%$) (60 Hz optional)

Output:

Inverter Design
Voltage

IGBT based PWM with Digital control
400 V AC (380 / 415, selectable)
3 Ph & N

Regulation

$\pm 1\%$ for balanced load
 $\pm 2\%$ for 100% unbalanced load

Phase Displacement

$\leq 1^\circ$ for balanced load
 $\leq 2^\circ$ for 100% unbalanced load
50 Hz (± 0.1 Hz) in free running mode,
(+ 2.5 Hz) in synchronous mode
(60 Hz optional)

Frequency

Waveform

Total Harmonic Distortion

True Sinewave
< 2% on linear load
< 5% on non-linear load (Ref IEC
62040-3)

Crest Factor

Overload Capacity

3:1
125% for 10 minutes
150% for 60 sec (inverse time
characteristics)

Environmental:

Ambient Temperature
Relative Humidity
Altitude

0 to 50° C
Up to 90% (Non-Condensing)
<1000 meter, above sea level

Physical:

Enclosure Protection
Testing Standards
Acoustic Noise (in dBA)
Overall Efficiency

IP-20
IEC 62040-3
< 60
Up to 91%

Full setup including batteries needs to fit in the available space (Width 40" Depth 15")

Protection:

Short circuit protection
Over load protection
Over temperature protection
Input low/high voltage control
DC low/high voltage trip

Battery:

Battery shall conform to JISC:8702 (Pt. I, II & III) or latest
Battery recharge time 8 to 10 hours
(after complete discharge to 90% charge) and charge rating: Battery recharge time to 90%
charge after 100% DoD

Battery charger should be capable to charge battery on C10 rating
VAH tolerance -1% of the defined capacity
Battery cutoff voltage during back up Not less than 10.5 V
More than two battery banks should not be used in parallel in any configuration
Batteries shall supply with With rack
Battery type SMF VRLA

Meters and Indicators:

UPS shall have LCD meter to measure and monitor input voltage, output voltage, output current/load level in %, DC current/DC level in %, DC voltage, input and output frequency
UPS shall have indicators for Mains on, Load on battery, Inverter, Battery level, Load level, Inverter over load
UPS shall have audible alarm for over temperature, mains failure, battery low, inverter overload

Warranty and Services

Warranty for UPS (on site comprehensive warranty) (in years) 3
Warranty for battery (replacement warranty) (in years) 2
After sales and complaint service within 24 hours
AMC support available after 5-year warranty
Quarterly preventive maintenance
Manufacturer shall provide and support for installation, commissioning, spares, technical support all over India
Availability of spares in close proximity (Spares should be easily available close to the site)

Certifications:

ISO Certification
Damp Heat Test: in accordance with IS:9000 (part 5/sec.2) 1981 at Temperature of 40 degree C, two cycles of (12+12) hours each 2007)
Dry Heat Test : in accordance with IS:9000 (part 3/sec.5)1977 (reaffirmed 2007) at 55 degree C for 16 hrs
Cold Test : in accordance with IS:9000 (Part 2/Sec.4)1977 (Reaffirmed 2007) at -10 degree C for 4 hrs.
Availability of the Type Test Report from Central Govt. /NABL/ILAC Accredited lab covering all technical requirements.
As per Meity (Government of India) guidelines storage battery shall have valid BIS CRS certifications as applicable as on date
As per Meity (Government of India) guidelines UPS shall have valid BIS CRS certifications as applicable as on date
All the test reports and certificates shall furnish by the supplier to the buyer/consignee on demand