

TECHNICAL SPECIFICATIONS

20 Kva UPS systems suitable for powering complex and sensitive equipment like hyphenated analytical instruments (e.g., LC-MS, GC-MS, ICP-MS etc.) which require stable, uninterrupted power to avoid data errors or hardware damage. The specific requirements are outlined below.

- Three Phase Input/ Three Phase Output.
- True Online Double Conversion UPS system.
- IGBT-based PWM technology with DSP/Microprocessor control.
- Suitable for continuous operation.
- 30 minutes backup at full load using Sealed Maintenance Free(SMF) VRLA batteries.
- In-built galvanic isolation transformer at output.
- Static automatic bypass and manual maintenance bypass.
- Delivering pure sine wave output with output voltage of 415 V $\pm 0.5\%$. frequency $50 \text{ Hz} \pm 0.05\%$
- Output power factor not less than 0.9.
- Efficiency not less than 95%
- Total harmonic distortion(THD) $\leq 2\%$ for linear loads and $\leq 5\%$ for non-linear loads.
- Crest factor 3:1
- Overload capacity of 110% for 5 minutes and 150% for 30 seconds.
- Complete with LCD display for monitoring input/output parameters, load, battery status and alarms.
- In-built battery charger.

- Suitable Battery rack.
- Cooling system
- Necessary safety features.
- Interconnections and earthing, including power and control cabling from UPS to the distribution board with all required accessories.
- Testing, commissioning, training of operating personnel.
- Five year comprehensive warranty.
- All complete in accordance with relevant IEC/IS standards and as directed by the Engineers-in-Charge.
- The UPS shall be compatible for analytical Laboratory instruments.
- Make list for UPS
 - 1.APC
 - 2.Vertiv
 - 3.General Electric
 - 4.Emerson
 - 5.Socomec
- Make list for UPS Batteries
 - 1.Exide
 - 2.Amaron