DATA SHEET DIGITALLY
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DATA SHEET



GENERAL INFORMATION OF INVERTER STACK 10KVA ONLINE UPS WITH PFC

- ITEM CODE: - **VP000149.**
- ITEM DESCRIPTIONAL NAME: - **INVERTER STACK 10KVA ONLINE UPS WITH PFC**
- TYPE: - **INVERTER STACK.**

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ELECTRICAL SPECIFICATION OF INVERTER STACK 10KVA ONLINE UPS WITH PFC IN & OUTPUT

- **INPUT SPECIFICATION**

PARAMETERS	VALUE
Input Voltage Range	160V – 280V AC
Input Frequency	0Hz – 50Hz
Input Power Factor	> 0.99 with PFC
Input Current THD	< 5%
Input Type	Single Phase 2 Wire + Ground

- **OUTPUT SPECIFICATION**

PARAMETERS	VALUE
Output Capacity	10KVA / 9KW @ 0.9 PF
Output Voltage	230V AC ±1%
Output Frequency	50Hz ±0.1Hz Crystal Controlled
Output Waveform	Pure Sine Wave
Crest Factor	3:1

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- **Overload Capacity** 110% for 10 min, 125% for 1 min, 150% for 10 sec.
- **Transfer Time** 0 ms - Online Double Conversion.
- **Output wave form** sine wave after IGBT.

ADVANTAGE OF STACK ONLINE UPS STACK 10 KVA WITH PFC

➢ A 10 KVA ONLINE UPS STACK WITH PFC (POWER FACTOR CONTROLLER) CHARGER OFFERES OFFER SEVERAL ADVANTAGES OVER A STANDARD UPS CHARGER.

1. **HIGH INPUT POWER FACTOR: -** High input power factor typically up to 0.99 which reduces the current drawn from the mains and lowers electrically losses.
2. **LOWER GENERATIING SIZING: -** Its drawn cleaner power, it works well the smaller generators.
3. **STABLE BATTERY CHARGING: -** Provides controlled, efficient supply, improving overall power quality.
4. **REDUCED HARMONICS: -** Minimizes distortion on the electrical supply, improving overall power quality.
5. **HIGHER EFFICIENCY: -** Consumes less energy, reducing operating costs.
6. **TRUE ONLINE PROTECTIONS: -** Supplies uninterrupted, clean sine – wave power with zero transfer time during outage.
7. **SUPPORTS SENSITIVE EQUIPMENTS: -** Ideal for servers, medical equipments, telecom systems industrial controls, and data centers.
8. **RELIABLE PERFORMANCE: -** Maintains a stabled output voltage and frequency even when the input power fluctuates.

IN summary a 10kVa online UPS with a PFC charger provides cleaner power, better battery performance, improved energy efficiency, and greater reliability for critical loads.

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FEATURES

1. CAPACITY 10 KVA.
2. TRUE ONLINE DOUBLE CONVERSION TECHNOLOGY.
3. PFC (POWER FACTOR CORRECTION) CHARGER FOR EFFICIENCY FOR BATTERY CHARGER.
4. HIGH INPUT POWER FACTOR.
5. PURE SINE WAVE OUTPUT.
6. ZERO TRANSFER TIME DURING POWER FAILURE.
7. WIDE INPUT VOLTAGE RANGE.
8. DSP/MICREOPROCESSOR – BASED DIGITAL CONTROL.
9. AUTOMATIC BATTERY CHARGING WITH SMART CHARGING.

10. OVERLOAD PROTECTION.
11. SHORT CIRCUIT PROTECTION.
12. OVER TEMPERATURE PROTECTION.
13. BATTERY DEEP DISCHARGE PROTECTION.
14. LCD DISPLAY COMMUNICATION INPUT/OUTPUT VOLTAGE, LOAD BATTERY STATUS AND ALARMS.
15. GENERATOR COMPATIBLE.
16. LOW HARMONIC DISTORTION (THD).
17. HIGH EFFICIENCY IN ONLINE MODE.
18. BETTER PLACEMENT.
19. ENVIORMENT FRIENDLLY.
20. LOWEST COST.

APPLICATIONS

1. DATA CENTER & SERVES ROOMS.
2. COMPUTER NETWORKS & IT INFRASTRUCTURE.
3. BANKS & ATM.
4. HOSPITAL & MEDICAL EQUIPMENTS.
5. TELECOMMUNICATION SYSTEM.
6. MEDICAL LINE MACHINES.
7. X-RAY EQUIPMENTS.

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INSTALLATION

1. INSTALLED A UPS IN A CLEAN, DRY, AND WELL – VENTILATED LOCATION.
2. CONNECT THE AC INPUT SUPPLY AND ENSURE PROPER EARTHING.
3. CONNECT THE EXTERNAL BATTERY BANK ACCORDING TO THE MANUFACTURING INSTRUCTIONS.

POWER ON

1. SWITCH ON THE MAIN AC INPUT.
2. PRESS THE UPS POWER ON BUTTON.
3. CHECK THE LCD DISPLAY TO CONFIRM THE INPUT VOLTAGE, OUTPUT VOLTAGE AND BATTERY STATUS.

CONNECT THE LOAD

1. AFTER THE UPS STARTS NORMALLY, CONNECT THE EQUIPMENTS (SERVES COMPUTER PLC"s CCTV SYSTEM MEDICAL EQUIPMENTS ETC).

2. ENSURE THE TOTAL CONNECTED LOAD DOES NOT EXCEED THE 10 KVA CAPACITIES.

OPERATIONS

1. DURING NORMAL MAINS OPERATIONS, THE UPS SUPPLIES CLEAN, REGULATED POWER SUPPLY SHOULD BE CLEAN, REGULATED POWER TO THE LOAD WHILE CHARGING THE BATTERIES.
2. IF THE POWER FAILURE OCCURES THE UPS AUTOMATICALLY SWITCHED OFF THE BATTERY MODE WITH ZERO TRANSFER TIME ENSURING UNINTERRUPTED POWER.

SHUT DOWN

1. TURN OFF THE CONNECTED EQUIPMENT FIRST.
2. SWITCHED OFF THE UPS USING THE POWER BUTTON.
3. FOR MAINTAINACE, DISCONNECT BOTH THE AC INPUT AND THE BATTERY BANK.

SAFETY

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1. ENSURED PROPER GROUNDING.
2. DO NOT OVER LOAD UPS
3. KEEP THE VENTILATION OPENINGS UNOBSTRUCTED.
4. PERFORM REGULAR BATTERY INSPECTION AND MAINTAINANCE.
5. KEEP THE AWAY FROM WATER, DUST, AND EXCESSIVE HEAT.
6. ONLY QUALIFIED PERSONNAL SHOULD PERFORM INSTALLATION AND SERVICING.