

How to Select a UPS Power Supply for a Monitoring System



Overview

STEP 1: List down all cabinets and loads of components or cabinet as a whole (VA or Watt). The individual component that requires specific power (e.g. 110 VAC, 230 VAC, 24 VDC, 48V DC, etc) that can be fed directly from respective cabinets. STEP 1: List down all cabinets and loads of components or cabinet as a whole (VA or Watt). The individual component that requires specific power (e.g. 110 VAC, 230 VAC, 24 VDC, 48V DC, etc) that can be fed directly from respective cabinets or power distribution panel or bulk power supply modules.

Rectifier: Converts AC supply to DC Supply
Inverter: Converts DC Supply to AC Supply
Static Bypass Switch: Automatic / Manual transfer of load from the inverter to bypass supply. This will be initiated when Inverter fails, inverter output voltage fails, the input supply has some trouble. Manual Bypass Switch: used to isolate any static transfer switch. Normal mode: Input supply is converted to DC and Charging the batteries and inverter further converts to AC supply of desired output. Discharge Mode: Input supply is not available. However, critical loads are fed from Batteries discharging and the inverter converts DC voltage to the desired AC supply output. Failure mode: UPS is running through bypass. Input Supply Voltage e.g. 3 phase, 415V $\pm$ 5%, 50Hz $\pm$ 2% UPS Output Voltage e.g. 240 V $\pm$ 1% (Between P-N) No of phases e.g. 1 Phase Neutral: Grounded neutral Output frequency e.g. 50 Hz $\pm$ 0.5% Battery Autonomy (Battery Back up) e.g. 2 hr of ESD, FGS, and Telecommunication system, 30 min for DCS. This will decide the battery bank capacity (AH) and th.

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Contact Us

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