

POWERTEK

ENERGY EMPOWERING PROGRESS



HIGH PERFORMANCE
POWER CONDITIONING SYSTEMS



ISO
9001:2008



www.indiamart.com/powertekenergysystems/

- IGBT ONLINE UPS
- CVCF
- FLOAT CUM BOOST CHARGER
- INDUSTRIAL SINEWAVE INVERTER
- AC-DC & DC-AC CONVERTER
- ISOLATION TRANSFORMER
- SERVO VOLTAGE STABILIZER
- CVT
- FREQUENCY CONVERTER



IGBT ONLINE UPS SYSTEMS

Available Configuration

► Single Phase Input Single Phase Output - 1 KVA to 15 KVA

SUPER SERIES MODELS

► Single Phase Input Three Phase Output - 5 KVA to 15 KVA

► Three Phase Input Single Phase Output - 5 KVA to 40 KVA

► Three Phase Input Three Phase Output - 5 KVA to 150 KVA

TECHNICAL SPECIFICATIONS

RATED POWER	1KVA to 15KVA	5KVA to 40KVA	5KVA to 15KVA	5KVA to 150KVA
► PHASE	1-Phase	3 Phase - 1 Phase	1 Phase - 3 Phase	3 Phase - 3 Phase
► INPUT				
INPUT VOLTAGE	170V-270V	340V-460V, 3-PHASE 4 WIRE / 5 WIRE	340V-460V	340V-460V, 3-PHASE 4 WIRE / 5 WIRE
FREQUENCY	45-55Hz	45-55Hz	45-55Hz	45-55Hz
► DC VOLTAGE	120V-182V	240V-360V	180V-182V	240V-360V
► TECHNOLOGY	Microcontroller based High Frequency PWM using IGBT as Principal Switching Device / DSP based design			
► INVERTER				
OUTPUT VOLTAGE	230V±1%	200/380/400/415 AC +1% 3-PHASE , 4 WIRE / 5 WIRE		
OUTPUT FREQUENCY	Crystal Controlled	50 Hz ± 0.01% or 60 Hz ± as required		
OUTPUT WAVE FORM	Pure Sinewave			
OUTPUT ISOLATION	Galvanic Isolation Transformer provided as standard design feature			
HARMONIC DISTORTION [THD]	Less than 3% for Linear Load and less than 5% for Non-Linear Load			
POWER FACTOR	0.8% to Unity			
PEAK SURGE HANDLING CAPACITY	300% for 3000 ms			
EFFICIENCY	Better than 92%			
OVERLOAD CAPACITY	125% for 5 minutes, 150% for 60 seconds			
CREST FACTOR	4:1			
TRANSIENT RECOVERY	within 3 cycle			
BYPASS	Manual Bypass / Static Bypass, transfer time < 2 ms			
► BATTERY CHARGER				
CHARGER TYPE	Constant Voltage Constant Current, Trickle / Float and Boost / IGBT Charger [optional]			
CHARGING TIME	8 to 10 hours			
CHARGING CURRENT	@ 10% of the Rated Battery AH			
► OPERATING CONDITIONS				
OPERATING TEMP.	0°C to 50°C			
RELATIVE HUMIDITY	90% Non-Condensing			
NOISE LEVEL	less than 55db at 1 meter			
COOLING	forced Air Cooling by Fan			
ENCLOSURE TYPE	IP-21 or IP-31			
► TRANSFER TIME	0 millisecond			
► INDICATIONS				
LCD DISPLAY	Input Voltage, Output Voltage, Input Frequency, Output Frequency, Output Current, Low Battery, Battery Current, Battery Voltage			
AUDIBLE ALARM	Battery Low, Mains Low, Fault, AC Over, Overload			
► PROTECTION	Output / Input Cut-Off, Overload, Short Circuit protection through Fuses and sensing as required Battery Over Voltage / Under Voltage Cut-Off • Reverse Polarity of Battery			
► COMMUNICATION & MANAGEMENT	Ethernet [optional]			
► GALVANIC ISOLATION	Superior full time isolation is built into all Powertek Energy UPS. Output is fully isolated by double conversion and isolation transformer. No need to have extra isolation as required for imported systems.			
► COMPONENTS MAKE	All components used in Powertek Energy UPS are of high quality and reputed make : • Capacitors : Alcon / Rescon • IGBT : Mitsubishi, Semikron, Toshiba • Rectifiers : Semicron, IXYS • Electrolytic Capacitor : Keltron, Philips, CDIL			
ALSO AVAILABLE	► Hot Standby Model ► IGBT Charger for Better Efficiency			
Custom Built Online UPS like 60Hz Frequency & 110V Output [3 Phase]				



Powertek Energy Online UPS Systems employ the hi-tech controlled Constant Voltage Constant Current Battery Charger



Controlled charging in Powertek Energy Online UPS systems enhances battery life, thus saving on battery replacements



Short Circuit Protection : designed to prevent damage due to short circuits, thus your investment in this equipment is safe.



A highly reliable IGBT based inverter circuit that is smaller in size, yet provides greater efficiency on battery mode.



Powertek Online Energy UPS Systems isolates the critical load from any disturbance, providing complete protection against spikes, surges, brownouts, blackouts, voltage and frequency variations.



Powertek's easy to read user friendly display to provide useful information such as On Mains, On Battery, Battery Charging, Battery Low, Overload, Battery Voltage, Output Frequency, Input Voltage etc.



An unrivaled reputation for quality. In addition to stringent quality systems, each Powertek Energy Product passes through a 72 hours soak test, ensuring minimal fail in the field.

IGBT ONLINE UPS SYSTEMS

SALIENT FEATURES

- Wide Input Window
- Latest Microprocessor based technology / DSP technology ➤ Unlimited Back up
- In-built Galvanic Isolation Transformer for better performance ➤ Advance Battery Management
- Sixth Generation Low Exhaust IGBT ➤ 100% unbalanced Load acceptable ➤ Static and Manual bypass
- User friendly Screen Display ➤ Ability to work with all critical loads and compatible with most type of Generators
- Cold Start Function ➤ On-site up-gradation of UPS by 25% of its present capacity
- Peak Surge Handling Capacity of 300% for 3000ms
- RS232 Communication Port [optional]

CVCF

CONSTANT VOLTAGE CONSTANT FREQUENCY

1KVA to 50KVA

Ultimate solution for
Color Sorter Machines and
Packaging Machines' power problems

- Provides Constant Voltage
- Provides Constant Frequency
- Ensures isolated Voltage
- Protects the load and itself from Supply Adversities



SERVO VOLTAGE STABILIZERS

AIR COOLED AND OIL COOLED

- Output A.C. Voltage correction for wide input variations
- 1% regulation
- No output waveform distortion
- Fast correction of output voltage : 20V / sec
- Output Self adjustable for a range of \pm 5%
- Auto / Manual operation facility
- Under-Voltage and Over-Voltage Cut-Out arrangement
- Digital Voltmeter with facility to read input or output voltage
- High Efficiency
- Compact and modular construction for ease in servicing



TECHNICAL SPECIFICATIONS

PHASE	SINGLE PHASE	THREE PHASE
➤ Input Range	170 to 270 VAC*	300 to 470 VAC
➤ Output Voltage	230 VAC	400 VAC
➤ Output Voltage Adjustments	220 to 240 VAC	380 to 415 VAC Ph to Ph
➤ Supply Frequency	47 to 53 Hz	47 to 53 Hz
➤ Load & Line Regulation	1%	1%
➤ Waveform Distortion	Nil	Nil
➤ Effect of Load Power Factor	None	None
➤ Ambient Temperature	0°C to 45°C	0°C to 45°C
➤ Environment	Designed for continuous indoor use	
➤ Correction Speed	20V/sec	20V/sec. Ph to Neutral
➤ Output Rating (KVA)	1KVA to 50KVA	5KVA to 1000KVA

FLOAT CUM BOOST CHARGERS

POWER HOUSE FCBC are designed to supply continuous power to the DC load and simultaneously charge the batteries connected. Input supply from 415V AC 3-Phase or 220V AC 1 Ph. is converted to regulate DC. The charger has two independent systems. Normally the DC power is supplied to the load by the Float Charger. It also supplies trickle current to the battery to keep it healthy. If the charging current under Float Mode exceeds a set level, Boost charger is switched ON. It supplies Quick charging current to the battery. On battery reaching the set value, the Boost Charger is switched OFF.



APPLICATIONS

Fleet cum Boost Chargers are must in Power Substations, Generating Stations, Telephone Exchanges etc. for control / monitoring systems, tripping circuits and supplying DC power source.

SPECIFICATIONS

➤ Aux	415V AC (3 Phase) / 240 V (1 Phase) +/- 20 %, +/- 10%, 50 Hz, +/- 3 Hz.	➤ Housing and enclosure	Heavy duty Sheet Steel Enclosure Finished with Powder Coated paint.
➤ Output	24V, 48V, 110V & 220V DC supply	➤ Mounting	Floor mounting
➤ Battery Type	Lead Acid / VRLA / PLANTA / SMF	➤ Operation	Auto/Manual
➤ Indications and Instruments	Indication for 3 phase mains supply Float / Boost section AC Volt meter with selector switch DC Volt meter with selector switch and battery volt DC Amps meter for load DC Amps meter for Charging.	➤ Control	CC / CV close loop
➤ Protection	MCB for Mains incoming supply MCB for output load Over load cut out by electronics circuit Over Voltage cut-out by electronics circuit Single phasing, under voltage for mains	➤ Rectifier	Full wave half controlled bridge
		➤ Optional	Fuse protection for each rectifier element Fuse failure relay DC Earth Fault Relay Alarm Annunciation Dual Float Charger option Any other as per requirement

POWERTEK ESTEEMED CUSTOMERS



POWERTEK ENERGY PRODUCTS ARE USEFUL IN FOLLOWING AREAS OF APPLICATIONS



POWERTEK ENERGY SERVICE NETWORK

- DELHI • BHOPAL • PATNA • LUCKNOW • AMRITSAR • RAIPUR • HALDWANI • JAIPUR
- LUDHIANA • BANGLORE • INDORE • RANCHI • PUNE • UDAIPUR • JAMMU

POWERTEK
ENERGY EMPOWERING PROGRESS

AUTHORISED DEALER

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Due to continual R&D efforts, the specifications mentioned here are subject to change without any prior notice. Any latest information may be checked with us or from our representative.

