RUDRA
Clean Power Experts

RUDRA POWER EQUIPMENTS (I) PVT.LTD.

Clean Power Experts

UPS SYSTEMS / POWER CONVERTERS

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Strengths of our MFG Partner (Since - 1989)

RUGGED DESIGN FOR TOUGH INDIAN ENVIRONMENTAL CONDITIONS

- EXPORTED PRODUCTS TO GULF, RUSSIA AND SOUTH AFRICA

ISO 9001 CERTIFICATION

- SUPPLIED SYSTEMS FOR DEFENSE APPLICATIONS

IN HOUSE MANUFACTURING OF WOUND COMPONENTS SO CUSTOMISATION AND UPGRADATION IS EASILY POSSIBLE

AFTER SALES SERVICE AVAILABLE FROM MAJOR CITIES ACROSS THE COUNTRY

GUARANTEED SPARES SUPPORT AND REASONABLE COST OF OWNERSHIP

Rudra Power Systems is a professionally managed organization contributing to the field of Electronic Power Back up Systems Through it's Online UPS, Off Line UPS, Home UPS, SFC, Stabilities, Chargers etc. The company also deals in all types of battery systems, The strength lies in its capability to design according to the customer's all types of requirements.

APPLICATIONS

DATA CENTERS

IT & ITES

SOLAR/ WIND POWER GEN.

BUILDING MANAGEMENT

EDUCATION

TELECOM EQUIPMENT

EDUCATION

TELECOM EQUIPMENT

SATELLITE EARTH STATIONS

BANKING

DEFENSE

R & D CENTERS

BIO-MEDICAL EQUIPMENT

INDUSTRIAL INSTRUMENTATION

MACHINE TOOLS

PHOTO COPYING MACHINES

PRODUCTS

RUDRA True On-Line UPS / SFC
Range – 1 KVA – 10 KVA (1Ph – 1 ph)
10 KVA – 30 KVA (3 Ph – 1Ph)
15 KVA – 500 KVA (3 Ph – 3 Ph)

- Wide range of Input Supply Voltage to suit Indian conditions
- Custom built design is possible as per User specifications
- Latest Technology • Compact size
- True ON-LINE Design
- High Performance; High Efficiency with near unity power factor
- Excellent Voltage Regulation and Transient Response
- Comprehensive and User friendly LCD Display with Mimic
- Support all types of Battery Systems
- Extended Run Time Facility
- Diesel Gen set Compatible
- Optional Intelligent Computer Interface
- Optional Auto By-pass facility

RUDRA Sine Wave SOLAR INVERTER/UPS
Range – 600 VA onwards

True Sine Wave output • High Frequency PMW design

INVERTER / UPS Mode availability as per user requirement

Extremely Compact size • Easy to install and Operate

Extended battery backups possible

In built Manual Bypass switch arrangement,

Optional Battery Reverse Protection

Output Short Circuit Protection

RUDRA Off Line 1 ph. & 3 ph. UPS Systems
Range - 6 KVA – 150 KVA

- Extremely efficient & fully automatic
- Back up for single / multiple elevators from single unit possible
- Compatible for all types of elevators
- Extremely Compact size
- User friendly Display with simple operation
- Easy to Install and Operate
- Extended battery backups possible
- Optional Remote Display and Announcement

Emerging Features Of Rudra Systems

- ☑ Built In AERD Hence Trapping In Side the lift is nullified in case of battery low trip. Also Avoids unnecessary panicness (Only for Off line UPS)
- ☑ IGBT Techmology Improoves the up time guarntee up to 99% by reducing break dawns.
- ☑ 3 phase Charger avoids the heavy loading on single phase and distributes the charging current on three phases equally.
- ☑ Unity Power Factor (Optional) reduces the electricity
- ☑ Auto phase reverse correction (optional)
- ☑ Isolation Avoids Shock at Battery terminals

LCD Information Display

LIFT IS RUNNING ON MAINS SUPPLY **LIFT IS RUNNING ON UPS, BAT OK**	Do you know which supply the lif is working on?	Auto emergency rescue device can inform you whether the lift is working on mains or on battery backup
UPS BAT.LOW. PLZ DO NOT USE LIFT	When will the lift stop working in case of low battery?	Lift may stop working at any moment before the ups is trip
UPS BAT.LOW. PLZ DO NOT USE LIFT	Battery is completely discharged & may stop any time	In such cases UPS will trip any time after completing the call.
SINGLE PHASING PLZ CALL MSEB **PHASE REVERSAL CALL ELECTRICIAN**	Is your lift working on battery supply for no reason?	Know its reasons like single phasing /phase reversal to prevent unnecessary discharge of battery

DIFFERENCE BETWEEN GENERATOR & UPS

	DG SET	UPS
PRICE	**High capital cost per KVA** • Auto start Panel • Sound proof Canopy. • Foundation, Installation & Commissioning cost. • Battery & Battery Charger Cost • Lessening Cost for Obtaining MSEB & Pollution Control Board Permission. • Exhaust piping for smoke up to top floor. Fuel storage license is required	**Cost involves only** • UPS Systems Cost. • Battery Set Cost
RUNNING COST	• Diesel Consumption even when working on no-load • No Load Consumption is around 80% • Attendant required to keep record of diesel requirement, Preventive maintenance schedule, to carry out battery charging once in a day, for keeping DG SET in working condition. • To keep DG-SET batter in charged condition, starting of DG SET for 5 to 10 min. 5. a day is recommended for battery charging. This adds to fuel consumption • Very high maintenance cost • Running cost may increase depending upon fuel price fluctations	• Battery replacement cost required after 3 years works out to be cheaper compared to diesel cost required for 3 years. • Battery energy is consumed according to load • No load consumption is as low as 3% • Very low maintenance cost • Fixed Running cost a long period (Battery life span)
POLLU-TION	• As it runs on diesel emits smoke Fumes, gases contiguously. • Very noisy	• Does not emit smoke, fumes or any gases. No noise. • Absolutely Environment Friendly & noise.
SIZE	• Very large space is required to install	• Very less space is required
LIFE	• Life of DG-SET depends on regular maintenance. Can get 10 to 15 years life it maintained properly. • But since it consists of moving part, regular wear & tear is common factor. Maintenance cost & cost of spare is high.	• Does not consist of any moving part. So, no wear & tear. • Can get life of 20 years if kept in clean environment. • Battery life is 3 years to 7 years depending on battery type
OUTPUT POWER QUALITY	• Power quality, efficiency, Diesel consumption, noise level & pollution will detroite depending on wear & tear. • Protection against overload, short circuit, & other such problems which may arise	• Will get high quality power throughout the life • Emergency landing facility Backup history record for easy diagnoses & solutions

		Standard Rating	
	1KVA - 10KVA	7.5 KVA - 30 KVA	15 KVA - 150 KVA
INPUT			
Voltage	230 V AC - 1 Ph	415 V AC - 3 Ph 4 Wire	415 V AC - 3 Ph 4 Wire
Operating Range	170 V - 265 V	345 V - 475 V	345 V - 475 V
Frequency	50 Hz		
Frequency Range	47 - 53 Hz		
Power Factor	> 0.8		> 0.92
OUTPUT			
Rating	1/2/3/5/7.5/10 KVA	7.5/10/15/20/25/30 KVA	15 / 20 / 25 / 30 / 40 / 45 / 50 / 60
			75 / 80 / 90 / 100 / 120 / 150 KVA
Voltage	220 / 230 V AC		400 / 415 V AC
Voltage Regulation	± 1%		
Power Factor	0.8 lag to unit		
Crest Factor	3 : 1		
Frequency	50 / 60 Hz		
Frequency Regulation	± 0.1%		
Wave Form	True sign wave		
Harmonic Distortion	THD < 3%		
Overload Rating	150% for 30 Seconds		
Transient Response	± 5% for full load change		
Response Time	Recovery to ± 2% within 5 msec		
DC Link			
Nominal DC Voltage	2, 3 Kva : 48 - 144 v	10, 15 Kva : 240/360 v	15 Kva : 240/360 v
	5 Kva : 120 / 144 / 180 v	20 Kva : 300/360 v	20 Kva : 300/360 v
	7.5, 10 Kva : 180 / 240 v	25, 30 Kva : 360 v	25 Kva & Above : 360 v
DC Bus Volts Ripple	< 2 %		
Battery Type	VRLA Sealed Maintenance Free (SMF) / Lead Acid Tubular (Flooded type) / Nil - Cd		
Isolation	DC Circuit Breaker		
EFFICIENCY (Typical)			
Inverter Efficiency	> 92%		
Overall Efficiency	>85%		
PROTECTIONS			
Rectifier	I/P AC Over voltage and Under voltage		
	DC Over Voltage and DC Low		
	Battery Charging Over current		
		I/P Single Phasing	
		I/P Phase Reversal	
Inverter	O/P Over voltage / Under Voltage		
	O/P Overload		
	O/P Short circuit		
	Over Temperature		

Dealer:

	Standard Rating		
	1 KVA - 10 KVA	7.5 KVA - 30 KVA	15 KVA - 150 KVA
AUDIO ALARM	Rectifier Trip		
	Overload		
	Mains Fail		
	Battery Low with Pre-alarm		
	System Trip		
METERING	Multifunction LCD Display to read the following parameters with user friendly Mimic Diagram		
	I/P Voltage & Current		1PH Parameters upto 30 KVA
	I/P Frequency		
	Battery Voltage		
	Battery Charging / discharging current		
	O/P Voltage		
	O/P Current		
	O/P Frequency		
PHYSICAL			
Dimensions	260(w)X550(d)X600(h) mm (1 - 5 kva)	325(w)X650(d)X650(h) mm (7.5 - 15 kva)	400(w)X900(d)X850(h)mm(15 kva)
	260(w)X550(d)X600(h) mm (1 - 5 kva)	260(w)X550(d)X600(h) mm (1 - 5 kva)	400(w)X900(d)X850(h)mm (20 - 40 kva)
			800(w)X800(d)X1800(h) mm (50 - 100 kva) - A
			A + 1000(w)X800(d)X1800(h) mm (120 - 150 kva)
Enclosure	IP 21		
Cable Entry	Bottom / As per requirment		
Colour	Siemens gray		
ENVIRONMENT			
Operating Temperatue	0 to 45°		
Storage	-10 to 70°		
Humidity	up to 95% RH (non- condensing)		
Cooling	Forced Air Cooling		
Noise	< 55 db	< 60 db	< 65 db
Alititude	< 3000 mtr. above mean sea level.		

OPTIONAL FEATURES	
Enclosure	IP 42 / Industrial Grade
Input Power Factor	0.99
Operating Tempurature	50° c
ECO mode with 98% Efficiency	
Auto Changeover to Bypass Supply (Static Bypass)	
Parallel Load Sharing / N + 1 Configuration is available	
Remote Indicating Panel	
Computer Interface, Self Diagnostics, SNPM	
Output Frequency	
Auto / Manual Battery Test/ Discharge Facility	up to 400 Hz
Auto Phase Reverse Correction	
19" Rack Mounting Type Models available	
IEC Conformance on request	
CUSTOM BUILT / MIL-GRADE SYSTEMS	