HITACHI
Inspire the Next

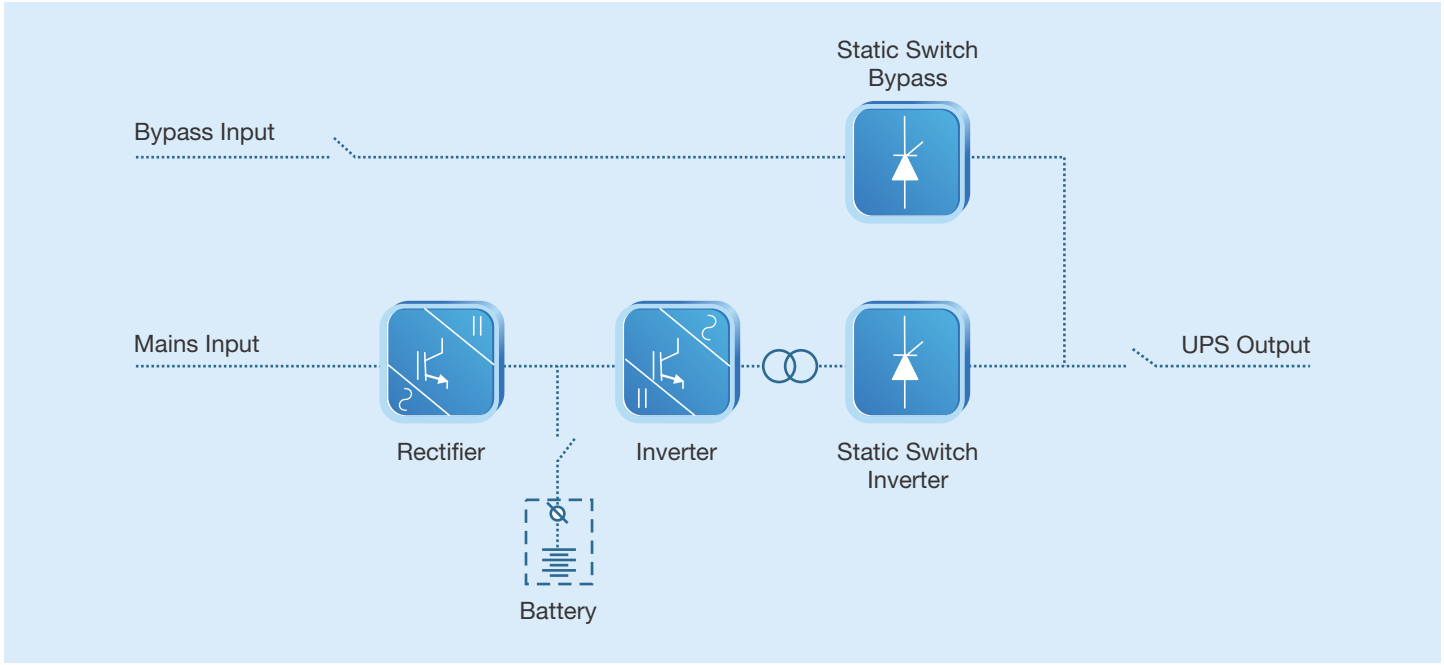
i4et UPS System

Range: 10 kVA, 20 kVA, 30 kVA & 40 kVA

With IGBT Rectifier
Built in isolation transformer
Expandable up to 120 kVA

I4[et] series of Hitachi UPS system is true online industrial grade UPS for critical load. Usage DSP and latent technology offers maximum reliability and flexibility at the lowest operating cost.

Single Line Diagram



Key Features

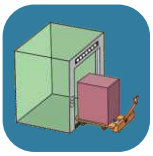
- 10-15-20-30-40 kVA model
- DSP based technology
- Wide input voltage and frequency range
- Unity input power factor
- Compatible with generator set
- Protection against short circuit and overload
- Intelligent BMS (battery management system)
- Suitable for 3:1 crest factor load
- Built in galvanic isolation transformer
- Suitable for separate or common battery bank
- Parallel operation
- Hot standby operation
- N+1 redundancy and capacity enhancement up to 120 kVA (3 x 40 kVA)
- Temperature compensated battery charging
- Auto transfer retransfer facility with bi directional static switch
- 999 alarms can be stored with memory
- LCD display and mimic panel for on line information
- Immune to input phase reversal

Optional Features

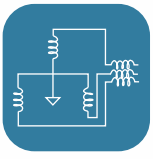
- Output voltage : 110 V / 115 V / 120 V
- Input isolation transformer
- Bypass CVCF / SSVS / SCVS
- Enclosed protection – IP 31,IP 41 & IP 42
- Communication - SNMP, ModBus, Profibus
- Fan redundancy
- Potential free contacts.
- Temperature : 0-50^{0}C

Benefits

High Efficiency
> 90% efficiency (PWM converter – Inverter & built in transformer)



Compactness
Compact footprint & light weight



No Input Filter
Reduced input THDi due to PWM converter

High Maintainability
Maintenance without system interruption

High Reliability
- Parallel redundant system with individual control
- Number of components reduced by approx 20%
- Various configuration available i.e. N+1, Split etc.

High Expandability
Addition units can be added in parallel configuration on demand

Technical Specifications

	Parameters	10 kVA / 20 kVA	30 kVA / 40 kVA
Input	Input Nominal Voltage	415 ±10% VAC, 3 Ph, 4 Wire	
	Input Voltage Operational Range	+25%, -30%	
	Input Nominal Frequency	50 Hz (±6%)	
	Input Power Factor	1.0 (Rated load) Near to unity	
	Input Current Distortion	⩽5%	
	Power Walk-in	Progressive over 15 sec.	
	Generator Rating	1.5 times the rated load	
	Phase Sequence Change	Operates on mains mode	
DC	Rectifier Type	IGBT	
	Nominal Voltage Regulation	±1%	
	Ripple	<2% RMS	
	Battery Charging Current	4 Amp / 7 Amp	16 Amp
	DC Bus Voltage	351 VDC / 135 VDC	351 VDC
	Batteries Supported	SMF / Ni-Cd	
	Permissible DC Variation	260 V - 410 V / 90 V - 160 V	260 V - 410 V
	No. of SMF Batteries 12V	26 Nos. / 10 Nos.	26 Nos.
Output	Voltage	220 / 230 / 240 VAC, 1Ph	
	Voltage Regulation	±1%	
	Frequency	50 Hz	
	Power @ 0.8 PF	8 kW / 16 kW	24 kW / 32 kW
	Over Load Capacity	110% for 60 Min. 125% for 10 Min. 150% for 1 Min.	
	Output Voltage Distortion	< 3% @ non linear load < 2 @ linear load	
	Transient Response for 100% Load	±10%	
	Recovery Time	< 1 Cycle	
	Frequency Stability Unsync	±0.1%	
	Synchronized	±1 Hz, ±2 Hz, ±3 Hz	
	Slew Rate	1 Hz / Sec.	
	Bypass : Transfer Time	< 20 ms async / 4 ms sync	
Mechanical	Height	1150 mm	1400 mm
	Depth	650 mm	830 mm
	Width	450 mm	800 mm
	Weight	250 Kg / 300 Kg	400 Kg / 450 Kg
	Color / Panel Finish	Dark structured black / RAL 7021	
	Cable Entry	Front end-bottom	
	Cooling	Forced air cooled	
	Crest Factor	3:1	
	Ingress Protection	IP20	
Environmental	Temperature	0 – 40°C Continuous	
	Storage Temp.	0 – 70°C	
	Humidity	95% RH	
	Altitude	1000 mtr	
	Noise	< 60 dBA	<65 dBA
	Type of Display	LCD with Keypad	

Global &
Pan India Presence

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In the spirit of continuous improvement, specifications are subject to change without notice.

ISO 9001
ISO 14001
OHSAS 18001
BUREAU VERITAS
Certification

e-gallery

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