

UPS Industrial 3P ATP IND-HV (10-800kVA)



- » Advanced technology DSP, IGBT components
- » Wide input range, robust design for harsh environment
- » Multi-CPU and software/hardware cooperate control
- » DC Start function, can be started without AC
- » True galvanic isolation design
- » Modular design for easy maintenance and minimize MTTR
- » Intelligent, safe and unique battery management system
- » Variety of accessory
- » Parallel operation
- » Specifications can be customized redundancy up to 1500kVA, making it an excellent choice for medium and large facilities.

Features & Advantages

Advanced technology DSP, IGBT and switching components

To increase the reliability and efficiency.

True Galvanic isolation design

Each of the UPS has true galvanic isolation on the output, which isolates the AC output under every mode of operation. This isolation solves the problem of poor input grounding. UPS systems can accept different grounds between input and output, thus stopping any current leakage through the ground.

True galvanic isolation reduces the mode noise that is normally transferred to the output from the AC power input source.

Multi-CPU design and software/hardware cooperate control

Several CPUs are employed in the control circuit, critical functions are designed to parallel redundancy to improve reliability.

Redundant power supply

An extra power supply is connected redundantly to supply power of the static switch, so that, there will be AC output no matter what happens to the UPS.

Plug & play modular design

The unique design of the UPS incorporates plug - and - play modules. The power circuit of the UPS has a modular design, which allows for each power circuit to be easily removed for quick maintenance and troubleshooting.

Each phase with individual inverter supporting

Characteristics will not be violated under 100% unbalance load.

Protection against detaching and floating of the neutral of input power supply

MOV (surge protector) is added at the input, provide sufficient protection to both UPS and the load from any lighting or surge caused by neighboring large loads.

User friendly control design

UPS is designed with breaker on/off sensor, power supply sensor etc.. Therefore, any operational mistake made by the user causes no harm to the UPS.

Intelligent charger with temperature compensation

To improve the battery life expectancy.

Huge charging power (selectable)

The charge power is selectable (Low/Medium/High) according to Ah of the battery, and can charge up battery of more than 8 hours back - up time without adding extra charger.

Intelligent, safe battery test circuitry

Battery is tested after every boost charge of battery (either initiated by battery discharge or by one month has elapsed) without stopping the rectifier. It prevents the risk of output AC failure in case of battery bad and can inform the user the battery condition.

Intelligent fan speed control

Fans will slow down under light load, so that the life expectancy of the fans is longer than it is specified. MTBF of fans are extended.

DC start function

The UPS can be started using its batteries without an AC power source connected. Because of special current limit circuitry, the UPS is protected from high inrush currents associated with DC battery connections on a dry DC bus.

Ordinary on-line UPS solutions will suffer damage to battery fuses and DC capacitors when batteries are connected to an empty DC bus for cold start applications.

Various interface options

Remote control panel, 3 phases software for PC monitoring, auto dialing module, battery monitoring module, 3 phases SNMP card, and emergent stop switch are available.

12-Pulse full controlled rectifier (option)

In order to further improve the power factor and reduce harmonic current drawn by the rectifier, our UPS from 120KVA and above use the 12-pulse full controlled rectifier. The total current harmonic current can be reduced to around 10%, and power factor is improved to over 0.8.

Parallel operation (option)

To increase the capacity and reliability. Load is equally shared between paralleled units. When one of the units has problem, the other units continue running without output interruption. No site adjustment is required.

Options

UPSCANTM - Remote control panel

A hand held display module with LCD and LED can monitor 1 - 99 UPSs with RS - 485 connected in series from distance < 1000M

UPSCOMTM - PC monitoring software

Can provide real - time three phases information of UPS connected on the line and monitor several UPSs with one PC.

DCMANTM - Battery monitoring module

An intelligent module to keep watching each battery in a battery bank connected in series and can distinguish and repair the aged battery before it is seriously worn out.

SNMP / HTTP agent

Can monitor and manage the UPS through Web browser and Java applet, providing simultaneously three phases data acquisition

Emergency stop switch

In case of hazard, for example, electric shock, fire or earthquake, the UPS can be shutdown (Will have no AC at the output) either through a switch (can be added upon request) or through smoke detector signal (can be added upon request) to prevent further injuries or destruction



Specifications

MODEL	10K	20K	30K	40K	50K	60K	80K	100K	120K	160K	240K	320K	400K	500K	600K~800K	
Phase	3-Phase Input / 3-Phase Output															
Kva	10	20	30	40	50	60	80	100	120	160	240	320	400	500	600-800	
INPUT (RECTIFIER)																
Input Voltage	380/220V, 400/230V, 415/240V(3 phase, 4-wire), Special specification can be customized															
Input Range	± 20% (> ± 20% is available upon request)															
Input Frequency	50/60 Hz ± 7%															
Power Walk In	15% ~ 100% : 15 sec															
Efficiency	99%															
Voltage Regulation	1%															
BATTERY																
Battery Type/Pcs	Maintenance free lead-acid batteries/12V x 29pcs															
Battery Start	Yes, UPS can be started without AC source															
INVERTER																
Output Voltage	380/220V, 400/230V, 415/240V(3 phase, 4-wire), Special specification can be customized															
Wave Form	Sine wave															
Output Power Factor	0.8															
Frequency Lock Range	45~55Hz/55~65Hz															
Output Frequency (Free Running)	50/60 Hz ± 0.1 Hz															
Phase Shift Under 100% Unbalance Load	120°±0.5°															
THD (Linear Load)	< 3 %															
Overload	< 110%	Continuous														
	110 ~ 124%	15 minutes														
	125 ~ 149%	5 minutes														
	150%	30 seconds														
Efficiency(100% Load) for 380/400/415V,3P4W	92%		93.50%		94%		94.50%		95%							
STATIC SWITCH																
Voltage Range	173 ~ 277 Vac (L-N)															
Main to Inverter	0 ms															
OVERALL CHARACTERISTICS																
Overall Efficiency(100% Load) for 380/400/415V,3P4W	90%		91%		92%		92.50%		93%							
Dimensions (W*H*D)cm	55 * 160 * 80						110*160*80				224 * 160 * 80		222* 190 * 100	334*190 * 100	446 * 190 * 100	
Weight (Kg, without battery) for 380/400/415V, 3P4W	300	400	470	520	560	630	950	1250	1400	1600	2700	3000	3600	4500	600K:6000 700K:6800 800K:7500	
Audible Noise(At 1M)	< 63 dBA			< 65 dBA			< 67 dBA				< 70 dBA		< 72 dBA	< 75 dBA	< 80 dBA	
Temperature	0 - 40 °C (32 - 104 °F)															
Humidity	0% ~ 90% (non-condensing)															
Altitude	< 1500M above sea level															
EN50091-1,-2	Yes															
Short Circuit Protection	Yes															
Lightning/EMC Filter	MOV/Input&Output (FCC CLASS A)															
Galvanic Isolation	Input&Output true galvanic isolation															
LED,LCD,Buzzer	Yes															
Remote Control/ Communication Interface	Monitoring 1~99 UPS simultaneously/dry contact, RS232, RS485															

* Different specifications required are available

* All specifications mentioned above are subject to change without prior notice

