On Line UPS On Line UPS

## **LTH Series**

The LTH Series UPS is an industrial online UPS which provides reliable and stable pure sine wave output power to your critical loads. With advanced technology of Rectifier, IGBT, PWM and CPU control, the LTH Series UPS is highly reliable. Besides, the LTH Series UPS applied true galvanic isolation design to solve the problem of utility AC power such as noise, lighting leakage current etc. Furthermore, the LTH Series UPS has individual inverter supports per phase which can endure 100% unbalance load. With its outstanding features, the LTH Series UPS provides safe, reliable and uninterrupted power to your sensitive electronic equipments at all times.

- Low Frequency Type UPS
   Industrial on line UPS which can operate under harsh environment.
- True Galvanic Isolation Design
   Input true galvanic isolation transformer to solve the problem of Mains power such as noise, lighting, etc.
- Each Phase with Inverter
   Each phase with individual inverter to support 100% unbalance load.
- With Maintenance Bypass
   Built-in maintenance bypass N.F.B. to let output power uninterrupted when the UPS needs to be repaired.
- Multiple Communication Ports
   Built-in RS232, remote monitor contacts,
   RS485 and dry contact to let you monitor and manage the UPS.
- No Battery Start Up Function
   In case the battery is damage, the UPS can still start up normally with the Mains power.



- Phase Angle Shift Protection
   In case the input power phase angle shift, the UPS will alarm.
- Wrong Phase Rotation Protection
   In case the input wiring phase rotation is incorrect, the UPS will alarm.
- Event Log Record
   The CPU can record up to 400 entries of the UPS abnormal events.
- Intelligent Battery Charger
   The intelligent battery charger controls boost and floating charging voltage to protect battery.
- DC Start Up Function
   The UPS can be start up without the Mains nower
- Option for 12 Pulse Rectifier
   The UPS can have 12 pulse rectifier to reduce the harmonic current.

## **Demonstration**



\* Application to laboratory, industrial machine and medical equipment

## **Specification**

Model (LTH-)		3110	3120	3130	3140	3304	3305	3306	3308	3310	3320
Capacity (KVA)		10	20	30	40	50	60	80	100	120	160
Input	Voltage	3 Phase 4 Wire + G, 220/380VAC, 230/400VAC, 240/415VAC									
	Voltage Range	± 20%									
	Frequency	50Hz or 60Hz ± 5%									
	Power Walk-in	0 ~ 100% : 10 seconds									
Output	Voltage	3 Phase 4 Wire + G, 220/380VAC, 230/400VAC, 240/415VAC									
	Frequency	50Hz or 60Hz ± 0.5%									
	Static Regulation	± 1% at linear load									
	Dynamic Regulation	<=2% at 50% load unbalance, <=5% at 100% load unbalance									
	THD Distortion	<=3% at linear load, <=5% at non-linear load									
	Transient Response	<5ms									
	Power Factor	0.8									
Battery	Voltage	192VDC (12V*16pcs			s)	) 348VDC (12V*29pcs)					
	Charge Current	As customer demand									
	Float Voltage	216VDC			390VDC						
	Boost Voltage	227VDC			410VDC						
	Recharge Time	4 ~ 8 hours 90% after fully discharge									
Static Switch	Main <-> Inverter	No break									
Indicator	LCD Display	Input / Output Voltage, Input / Output Frequency, Output Loading Status Battery Status, Event Log									
	LED Display	Mimic display									
Protection	Overload	100% ~124% for 10 minutes, >125% for 1 minute, >150% to bypass									
	Over Temperature	Yes									
	Phase Rotation Incorrect	Yes									
	Phase Angle Shift	Yes									
	Lighting/EMI Filter	Yes									
Environment	Temperature	0° C~40° C									
	Humidity	0% ~ 95%, non-condensing									
	Noise Level	<60dB at			70.230	AND A COLOR OF THE PROPERTY OF					
Communication	Interface Port	RS232, Dry Contact, RS485, Remote Monitor Contacts RS485-RS232 Adapter (option), Remote Monitor Box (option) RS232-SNMP Adapter (option)									
Dimension W*H*D(mm)	UPS	650*1550*800			1100*1710*860						
	Battery	Internal battery			Depends on external battery bank						
Net Weight	UPS (No Battery)	350 400 450			500	550	600	650	800	900	1050

<sup>\*</sup> Product specification is subject to change without prior notice