

# RUPSOL Series LDT

## Series 3 Phase Online UPS (10-40KVA)

### SYSTEM INTRODUCTION

DT-X Series is a true full digitized 3 Phase double conversion online UPS. It has parallel redundant features. THDI $\leq$ 7%, and overall efficiency AC~AC up to 93%. DT-X Series can be defined as a high reliability, cost-effective and efficiency green power.



### SYSTEM FEATURES

#### ■ High Performance Index

- Advanced IGBT and HF APFC Technology. Input THDI $\leq$ 7%, Input Power Factor $\geq$ 0.99 to save more energy;
- DT Series adapts the 5th generation IGBT Inverter control technology to enhance the output voltage/current performance. Online 3 Phase Input and output double conversion structure to adapt 380/400/415V, 50/60Hz Mains Grid Supply Systems.
- Wide Input Voltage Range 380Vac (-45% to +25%) or 210-475 Vac with 50/60Hz  $\pm$ 5% Frequency Range. High adaptive capacity and Generator Capability with ratio of 1.2 : 1.
- Overall Efficiency upto 92%. Can reach to 98% on ECO Mode.
- Powerful overload ability with output short circuit protection: 110%-120% overloads for 10 mins. 125%-150% for 1 min.
- Intelligent battery management to extend battery life. Optimized charging solutions based on operational mode, such as float charge or equalized charge. Flexible Battery Configuration: 10-20KVA with 16/20 Units, 30-40KVA with:  $\pm$ 16/20 Units

#### ■ Safe, Reliable, and Easy Maintenance

- LDT-X Series adapts DSP technology to control UPS all kinds of power function processes (including Parallel function) in order to increase system reliability.
- Flexible Single or Dual Utility Power Input to comprehensively protect load devices.
- Battery Misconnection protection. UPS will not be damaged by reverting the polarities connection.
- Self-Evaluation and Alarm of Phase Misconnection or Lost.
- 100% 3 Phase Unbalanced Allowance Design.
- Front Modular Maintenance Design. MTBF can be upto 300K Hours.
- 90% of system components are from international famous brands. All devices has been aged and fully tested for at least 24 hours before leaving the factory.

### COMPATIBLE APPLICATIONS/LOADS

LDT-X Series is designed for small and medium important equipment/application systems, such as SME data exchange centers, communication equipment industry, and precision instruments.



## ► SPECIFICATION

Model	LDT100S33-X	LDT100L33-X	LDT200S33-X	LDT200L33-X	LDT300L33-X	LDT400L33-X
Capacity	10KVA/8KW	10KVA/8KW	20KVA/16KW	20KVA/16KW	30KVA/24KW	40KVA/32KW
Host Machine Specification						
UPS Structure	Online Double Conversion					
Appearance	High Frequency Online Design					
Overall Efficiency (AC-AC)	>91%				>93%	
Noise (In 2 Meters)	<60dB					
Working Temp.	-10~40℃					
Storage Temp.	-25 ~60℃(Without Batteries)					
Humidity	<95% Non-Condensing					
National Standard	GB4943					
International Standard	EN 50091-1/2, EN62040-1, EN62040-2					
Parallel Redundancy	Parallel Redundancy Upto 8 Units					
Protection	Overload, Short-Circuit, Over Temp., Utility Power Voltage High/low, BAT Voltage High/low					
DC Start	Available					
Generator Compatibility	Available					
Display	LCD Display with multi information; Output Voltage Selectable: 200/208/220/230/240□Output Frequency Selectable: 0/50/60Hz; +LED (Working Diagram)					
Mute	Auto					
Cabinet Standard	IP20					
Cooling System	Intelligent Speed Control Cooling Fan					
Elevation	<1500M, without derated					
Rectifier Specification						
Input Voltage	380Vac+N+W三 相					
Input Voltage Range	265-494Vac,100%满载, 空载可达到210–494Vac					
Input Frequency Range	40-70Hz(可调)					
Soft-Start	>20秒					
Input PF	0.99					
THDI	<5%					
Output Specification						
Output Voltage	Line Voltage: 380×(1±1%)AC or Phase Voltage: 220×(1±1%)AC					
Output Power Factor	0.8					
Output Voltage Regulation	380Vac±1%(Static Load); 380Vac ± 3%(50-0% Sudden Change); 380Vac±5% (100-0% Sudden Change)					
Output Frequency	46-54Hz Sync with Utility grid, more than the range lock at 50Hz, Battery Mode is 50/60Hz±0.1%					
Distortion	<1%(Linear Full Load), < 3%(Non-Linear Full Load)					
3 Phase Unbalanced	Allow 3 Phase 100% Unbalanced					
Output Volt Unbalanced Degree	≤1%(Balanced Load); ≤2%(50% Balanced Load)					
Input/Output Phase Shift	≤1°(Balanced Load); ≤2°(50% Balanced Load)					
Frequency Tracking Range	46-54Hz					
Output Waveform	Pure Sine Wave					
Overload	105-125%±5% More than 1 minute; > 125-130%±5% More than 30 Seconds; ≥ 135%±5% More than 300 ms					
Crest Ratio	3:1					
Short-Circuit	Circuit Auto-Protection, Bypass Switch Tripping					
Output Abnormal	INV. Output Auto-Locked Protection					
Bypass Specification						
Static Bypass Input Range	380Vac(–15~+15%)					
Bypass --> INV Transfer Time	2ms					
Frequency Tracking Speed	0.5-2hz/s					
Manual Maintenance Bypass	Available					
Battery Specification						
Type	Sealed Lead Acid Maintenance Free					
BAT Rated Volts/Units	192Vdc Standard	192Vdc Standard /240Vdc Optional	240Vdc Standard Optional	192Vdc Standard /240Vdc Optional	±192Vdc / ±240Vdc Optional	±192Vdc / ±240Vdc Optional
BAT Low	Shutdown Protection					
Communication Specification						
Communication Port	RS232/SNMP/485/ Dry Contact(Optional Accessory)					
Remote Software	Multi-functional Monitoring System, Online and BAT Mode Status, BAT Fault, Remote Control					
Physical Parameters						
Size mm(W×D×H)	260×560×717	260×533×501	260×710×717	260×710×717	260×710×717	260×710×717
Net Weight Kg	72	26	98	57.5	58.5	62

Note: Specifications are subject to change without further notice



LCD+LED



DSP



10-40KVA Rear Panel