

DT series online UPS power supply

1-3KVA(Built-in lithium battery)



The DT series is a UPS power supply with a built-in lithium iron phosphate battery. The product is applicable to mines, imported equipment, nautical charts, the telecommunications industry, banks, hospitals, computers, etc.

PRODUCT FEATURES

- Super strong environmental adaptability:**
Ultra-wide voltage input, wide frequency range, and built-in three or four levels of lightning protection. Adopt active PFC technology to reduce power grid pollution.
- The generator has strong compatibility:**
The output voltage can be set to (100/110/120/127Vac), automatically adapting to 50Hz/60Hz power grids without customization, and is globally applicable.
- Long-life lithium iron phosphate battery:**
Class A lithium iron phosphate batteries feature high safety, long lifespan (float charge >10 years, cycle > 1,200 times), small size and light weight.
- Advanced DSP digital control:**
Adopting leading DSP digital control technology, it features precise and rapid data processing, reliable performance, strong load-carrying capacity and high efficiency.
- Automatic startup/Unattended:**
It automatically turns on when connected to the mains power supply, avoiding human forgetting. It is suitable for scenarios such as base stations and remote sites.
- Highly reliable design:**
The motherboard adopts highly reliable components and strict three-proof treatment, enhancing environmental adaptability and extending product lifespan.
- Intelligent Management (Optional):**
It provides a standard RS232 interface and supports cloud iot expansion (centralized monitoring, mobile APP), Modbus485, dry contacts, etc.



Remote monitoring page

PRODUCT PARAMETERS

Specifications & Parameters		Model		DT1K	DT2K	DT3K	DT1KR	DT2KR	DT3KR
Rated Output Capacity				1000VA/800W	2000VA/1600W	3000VA/2400W	1000VA/800W	2000VA/1600W	3000VA/2400W
Product Installation				Tower			Rack-mount		
AC input	Operation Mode				100/110/120/127Vac, Default 110V Output				
	Rated Voltage				100/110/120/127Vac, Default 110V Output				
	Rated Frequency				50Hz/60Hz Adaptive				
	Input Voltage Range				85~145VAC±5				
	Input Frequency Range				(45~55) ±0.5Hz/ (55~65) ±0.5Hz				
Battery	Rated Battery Voltage		24V/36V	51.2V		36		51.2V	
	Cell Type		Grade A lithium iron phosphate						
	Number of Cells in Series		12S	16S		12S		16S	
	Built-in Battery Capacity (WH)		540	1080	1450	540	1080	1450	
	Battery Life		Float Life >10 yrs; Cycle Life >1200 cycles						
	Cell Protection		Overcharge, Over-discharge, Imbalance, Overcurrent, Short Circuit, etc. per cell						
	Cell Balancing		Yes						
	Power Management		Yes						
	Low Voltage Alarm/Shutdown		21~30/31.5-45V	44/42-60V		33/31.5-45V		44/42-60V	
	Charging Voltage		29/42.8±0.2V	57±0.3V		42.8±0.2V		57±0.3V	
	Charging Current		2A	3A		2A		5A	
	Charging Method		CC/CV (Constant Current then Constant Voltage)						
	Charging Time		8-10 hours to 90% capacity						
	Backup Time		Half: 50min; Full: 30min			Half: 42min; Full: 23min		Half: 50min; Full: 30min	
AC Output	Output Voltage		100/110/120/127Vac±3% (Inverter Output)						
	Output Frequency		50/60±5Hz (Normal AC input), 50/60Hz±1% (Abnormal AC input)						
	Dynamic Voltage Transient		<5%						
	Dynamic Transient Recovery Time		< 60ms						
	Output Waveform		Sine Wave THD <3% (Linear Load); THD <8% (Non-linear Load)						
	Output Power Factor		0.8						
	Overload Capacity		130% for ≥20s (Mains mode), 120% for ≥20s (Battery mode)						
	Output Crest Factor		3:1						
	DC-AC Transfer Time		0ms						
	Inverter-Bypass Transfer Time		<4ms						
Communication Function		Standard RS232; Optional RS485 (Modbus), Dry Contact, SNMP, etc.							
Protection Function		Battery Input Overvoltage, Battery Low Voltage, Overload, Overtemperature, Short Circuit, Output Overvoltage, Output Low Voltage Protection							
Weight (Kg)	Net Weight	8.7	20	23	9.5	20.6	23		
Dimensions & Packaging (W*H*D)mm	Net Dimensions	145*220*355	190*318*433	190*318*433	432*88*300	432*88*600	432*88*600		
	Packaging Dimensions	442*251*363	560*340*485	560*340*485	538*190*402	538*168*704	538*168*704		
Operating Environment	Temperature	-10°C ~ +40°C (Battery cannot be below 0°C)							
	Humidity	20% ~ 90%, non-condensing							
	Altitude	No derating below 1000m; derate 1% per 100m above 1000m							
Storage Environment	Temperature	-35°C~+45°C							
	Humidity	20% ~ 90%, non-condensing							

STANDBY SCHEDULE

Backup time	100W	200W	400W	600W	800W	1000W	2000W
DT1K(R)	188min	110min	55min	37min	-	-	-
DT2K(R)	200min	160min	95min	60min	45min	40min	-
DT3K(R)	290min	240min	135min	87min	63min	58min	30min