

DS-300 Power Serie

Uninterruptible Power Supply
200-500kVA



Cold Start **High Input Power Factor** High efficiency up to 94% **External REPO switch input**
IGBT Transformerless Technology DSP Control.

Technical Specifications

- Low input current total harmonic distortion (THD)
- Static and maintenance bypass switch
- Output and by-pass short circuit and overload protection
- 192 events memory (192 events 4500 alarms)
- Clock and calender (battery supported)
- Automatic battery test, remaining battery time indicator
- Temperature compensated charge system
- Regenerative backfeed function
- 2 RS232 serial port and 12 dry contact outputs
- 3 DSP controlled modular structure
- Optional Graphical and touch panel
- CE, ISO9001, ISO14001 certification
- 2 years warranty
- 10 years spare parts support

Pf: 0,9
**True On-line
3:3 Phase UPS
200-500 kVA**

Specifications

MODEL	DS3200	DS3250	DS3300	DS3400	DS3500
Power(kVA)	200	250	300	400	500
INPUT					
Power factor			> 0.98		
Voltage		380-400 VAC 3F, 4N+Earth, +/-20% (240/415 VAC + %15 -%25 optional)			
Input THD			< 5%		
Input frequency			50Hz / 60Hz +/- 5% selectable		
Input frequency protection			2 levels protection (minimum and maximum)		
Regenerative backfeed			Standard		
Input power limiting			Standard		
EMI			EN62040-2		
Protection			Fuses, Voltage & Frequency tolerance, Input power limit, Phase sequence indicator		
Power walk in			Standard Adjustable		
Startup delay			Standard Adjustable		
Control system			seperate DSP controller for PFC rectifier module		
Rectifier input fuses			Standard		
Rectifier input switch			Standard		
Rectifier input CB			Standard		
OUTPUT					
Power (kW)	180	225	270	360	400
Power factor			0,9		0,8
Voltage		380-400 VAC 3F, 4N+Earth, +/-1% (240/415 optional)			
Frequency			50Hz / 60Hz selectable		
Frequency tolerant			+/- 2% (synchron) +/- 0,2% (free running)		
Frequency stability (free running)			0,005%		
Efficiency			up to 94%		
Crest factor			3:1		
Overload protection		100% - 125% load: 10 min.	125% - 150% load: 1 min.	> 150% load: by-pass	
Output current limiting				Standard	
Short circuit protection			Direct IGBT saturation protection and advanced short circuit protection		
Output voltage protection			2 levels electronic protection		
THD (%100 linear load)			< 3%		
Control system			seperate DSP controller for Inverter module		
BATTERY					
Type		Maintenance free ,sealed lead acid			
Batteries		2X30=60 batteries			
Charge voltage		2x405 Vdc			
Discharge end voltage		2x300 Vdc			
Battery cabinet		External			
Ambient temperature		25 °C			
Battery protection		Fuses ,charging current limiting			
Battery voltage protection		electronic 3 level alarms			
Battery test system		automatic every 72 hours			
Temperature compansation		Standard			
Battery remaining time indicator		Standard			
Battery fuses		Standard			
Deep discharge protection		Standard			
FRONT PANEL					
Front panel control		Seperate DSP controller for panel and communication functions			
Human interface		Alphanumeric LCD panel, mimic lamps and control buttons standard			
Alarm log memory		512 events			
Communication		2xRS232 serial ports, 4 standard and 8 optional DRY contact alarm relays			
Phase to phase measurements		Rectifier input ,By-pass input ,Inverter output and UPS output voltages			
Phase to neutral measurements		Rectifier input ,By-pass input ,Inverter output and UPS output voltages			
Power measurements		Output Watts ,output VA ,Load crest factor ,output power factor ,load percentage			
Current measurements		Rectifier input currents ,battery charge and discharge currents ,output load currents			
Frequency measurements		Rectifier input frequency ,by-pass input frequency ,output frequency			
Temperature measurements		Cabinet inside ,battery ambient temperature and optional sensors			
Maintenance indicators		Seperate Operating ,General ,battery ,Fan maintenance and optional hourmeters and warnings			
Overtemperature protection		2 electronic temperature sensors and thermal contacts			
Failure memory		Standard (records all measured parametres during failures)			
Factory settings memory		Standard (settings backup memory)			
Module communication		CAN interface			
Free software		T-Mon UPS Software (3 clients)			
Operating temperature		0 C - 40° C			
Protection		IP20			
Humidity (non condensed)		90% max			
Operating height		< 1000 m below sea level			
Noise level	< 68 dBA			< 72 dBA	
Calibration over RS232		Available (Device calibrator software)			
Log download over RS232		Available (DLOG software)			
Weight (kgs) (without batteries)	482	550	638	737	780
Dimensions (HxWxD)	1900 x 880 x 775		1900 x 1250 x 775		2020 x 1250 x 840

