

## DS POWER

250-500kVA

Transformerless UPS Topology

IGBT Rectifier

DSP Control



TOWER



UPS ONLINE



SERVICE /  
TECH. SUPPORT



ECO FRIENDLY



0.9

POWER FACTOR



The DS Power range UPS uses the latest DSP technology to be programmed to suit a wide variety of electrical environments without impeding its performance. With the DS Power range, efficiency, reliability and functionality are enhanced to levels unattainable with the old analogue technology. This technology does not only create significant increase in MTBF, but the capability of DSP to accurately manipulate signals at very high speed permits all the UPS subsystems to be controlled with greatly increased precision.

## GENERAL SPECIFICATIONS

- Transformerless UPS topology
- Low input current total harmonic distortion (THD)
- High input power factor
- High efficiency up to 94,5%
- Cold start function
- Static and maintenance by-pass switch
- Output short circuit and overload protection
- External REPO switch input
- 512 events memory (512 events 45000 alarms)
- Clock and calendar (battery supported)
- Automatic battery test, remaining battery time indicator
- Temperature compensated charge system (optional)
- 2 RS232 serial ports and 12 dry contact outputs
- 3 DSP controlled modular structure
- Optional SNMP and MODBUS adaptors
- Optional graphical panel
- Optional usb flash memory
- Full digital structure
- Small footprint
- Ecomode operation (optional)
- Fewer electronic components
- Output current limiting
- Advanced diagnostics for the input
- Selectable input/output voltage/frequency/range
- Split by-pass input (second input)
- Output DC leakage protection
- Separate DSP for inverter control
- Separate DSP for the PFC
- 3 level battery protection
- High charge current capacity
- Charge/discharge current indicator
- Advanced remote control features
- Manufactured according to EC Directive; EN62040

## TECHNICAL SPECIFICATIONS

MODEL	DS3250	DS3300	DS3400	DS3500
Power (kVA)	250	300	400	500
<b>INPUT</b>				
Voltage	380/400 VAC 3P + N + G ± 20% (415 VAC +15%, - 25% optional)			
Frequency	50Hz / 60Hz, ± 5%			
Power factor	≥ 0.99			
(THDI) (*)	≤ 3%			
By-pass voltage	380/400 VAC 3P + N , 4 Wires, ± 10%			
Protection	Fuses, Voltage & Frequency tolerance, Input power limit, Phase sequency indicator			
<b>OUTPUT</b>				
Power (kW)	225	270	360	450
Power factor	0,9			
Voltage	380/400 VAC 3 Phase + N , ± 1% (415 optional)			
Frequency	50Hz / 60Hz			
Frequency tolerance	Line synchronized: ± 1% / Free running: ± 0,1%			
Efficiency	up to 94,5%			
Crest factor	3:1			
Overload protection (**)	100% - 125% load: 10 min, 125% - 150% load: 1 min, - > 150% load: by pass			
Other protections	Advanced short circuit, Voltage tolerance, DC balance, Regenerative load, Current limiting			
Voltage THD	< 2% (at 100% linear load), < 5% (at 100% non-linear load)			
<b>BATTERIES</b>				
Type	VRLA AGM / GEL / NiCd			
Number of batteries	2x30: 60pcs			
Charge voltage	2x405 VDC			
End of discharge voltage	2x300 VDC			
Battery cabinet	External			
Battery ambient temperature	25°C			
Protections	3 level alarms, Battery fuses, Charging current limit, Temperature compensation (optional)			
Automatic testing	Standard every 72 hours (adjustable)			
<b>GENERAL</b>				
Standards	EN62040-1, EN62040-2, EN62040-3			
User interface	TFT panel, 5 vector buttons, Buzzer			
Indicators	P-N voltage, P-P voltage, Current, Power, Crest Factor, Frequency, PF, Service Time			
Advanced	Self diagnostics, 3 maintenance time indicators, Calibration over RS232, operating hour meter			
Communication	2xRS232 serial ports, 4 standard and 8 optional DRY contact alarm relays			
Inputs	EPO input, Interactive battery panel input, Genset input			
Genset kit	Standard (programmable)			
Software	Standard T-Mon UPS Management Software (3 clients + 1 server management)			
Alarm logging	Standard: with time & date 512 events			
Protections	Power module over-temperature, Over current, Temperature high alarm			
Temperature range	0°C - 40°C			
Protection degree	IP20			
Relative humidity	90% max. (non-condensing)			
Altitude	< 1000m. above sea level			
Acoustic noise	< 68 dBA		< 72 dBA	
Weight without batteries (kg)	550	635	680	890
Dimensions (mm) HxWxD	1975x880x848		2000x1243x874	
<b>OPTIONS</b>				
Different input / output voltage	Please ask			
Transformer	Galvanic isolation transformer at the input & output			
Software	T-Mon Admin Multi UPS monitoring 10-50-100-200 clients, T-Mon Server 50-100-200 clients			
Adaptors	SNMP, RS485, Remote monitoring panel, MODBUS (RS485 or TCP/IP), TCP/IP, GSM/GPRS Modem, Comport multiplexer			
Parallel operation	up to 8 units			
(*) Depending on power and input/output conditions				
(**) The waiting times for excessive loads vary depending on the ambient temperature.				