

## DS POWER H

300-400kVA

3-Level Technology

IGBT Rectifier

DSP Control



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
- 3 Level topology
- High input power factor
- High efficiency up to 95%
- 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
- 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
- Manufactured according to EC Directive; EN62040
- 2 years warranty

## TECHNICAL SPECIFICATIONS

MODEL	DS3300H	DS3400H
Power (kVA)	300	400
<b>INPUT</b>		
Voltage	380/400 VAC 3P + N + G $\pm$ 20% (at 100% load) / - 40% (at 70% load)	
Frequency	50Hz / 60Hz, $\pm$ 10%	
Power factor	$\geq$ 0.99 (at 100% load)	
(THDI) (*)	$\leq$ 3%	
By-pass voltage	380/400 VAC 3 Phase + N, $\pm$ 10%	
Voltage distortion	$\leq$ 10%	
Protection	Fuses, Voltage & Frequency tolerance, Input power limit, Phase sequency indicator	
<b>OUTPUT</b>		
Power (kW)	270	360
Power factor	0.9 (0.8 and 1.0 optional)	
Voltage	380/400 VAC 3P + N, $\pm$ 1% (415 VAC optional )	
Frequency	50Hz / 60Hz	
Frequency tolerance	Line synchronized: $\pm$ 2% (adjustable) / Free running: $\pm$ 0.1%	
Efficiency	up to 95%	
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	$\leq$ 2% (at 100% linear load)	
<b>BATTERIES</b>		
Type	VRLA AGM / GEL / NiCd	
Number of batteries	2x30 ( $\pm$ 30): 60 pieces	
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	4 lines LCD panel, Mimic leds, 5 vector buttons, Buzzer, Optional TFT panel	
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, Overcurrent, 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	< 68dBA	
Weight (kg)	635	680
Dimensions (mm) HxWxD	1900x1250x775	
<b>OPTIONS</b>		
Different input / output voltage	Please ask	
Transformer	Galvanic isolation transformer at the input & output (internal)	
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		