# DS POWER H

#### UNINTERRUPTIBLE POWER SUPPLIES

### 300-500kVA

3 PHASE IN / 3 PHASE OUT

- 3-LEVEL TECHNOLOGY
- **IGBT RECTIFIER**
- **DSP CONTROL**





UPS ONLINE







SERVICE / TECH.

FCO FRIENDLY

DS Power H Online UPS uses the latest DSP technology to be programmed to suit a wide variety of electrical environments without impending its performance. With the 3-Level topology, efficiency, reliability and functionality have been raised to levels unattainable with legacy analog technology. This technology not only creates a significant increase in MTBF, but the DSP's ability to accurately process signals at very high speed allows all UPS subsystems to be controlled with greatly increased precision.



### GENERAL SPECIFICATIONS

- Transformerless UPS topology
- 3 DSP controlled modular structure
- Separate main control board advantage for rectifier and inverter
- · 3-Level technology and fully digital structure
- Less electronic components and SMD technology
- · Low input current total harmonic distortion (THDi)
- · High input power factor
- High efficiency up to 95%
- Selectable input/output voltage/frequency range
- Static and maintenance by-pass switch
- · High charge current capacity
- Eco Mode operation (optional)
- Split by-pass input (dual input)
- Advanced TFT front panel
- Optional 0.8 and 1.0 output power factor (PF)
- Cold start function
- EMI/RFI input and output filter
- Compliant with IEC EN62040 directive

- Conforms to CE, TSE and GOST standards
- ISO9001, ISO14001 compliant production
- Advanced control at the input
- 3 level battery protection
- Output current limitation
- Output DC leakage protection
- External REPO input
- 512 events memory (46,000 alarm)
- Clock and calender (battery supported)
- Automatic battery test, remaining battery time indicator
- 2 RS232 serial ports and 4 programmable dry contact outputs
- Optional 12 dry contact outputs
- Optional SNMP, MODBUS and Remote Monitoring Panel
- Viewing device operating parameters
- · Advanced remote control features
- User and central service password-protected security
- 2 years warranty















## TECHNICAL SPECIFICATIONS

MODEL	DS3300H	DS3400H	DS3500H
Power (kVA)	300	400	500
INPUT			
Voltage	380	0/400 VAC 3P + N + G ± 20% (at 100% load) / - 40% (	(at 70% load)
Frequency	50Hz / 60Hz, ± 10%		
Power factor	≥ 0.99 (at 100% load)		
THDI (*)	≤ 3%		
By-pass voltage	380/400 VAC 3 Phase + N, ± 10%		
Protection	Fuses, Voltage & Frequency tolerance, Input power limit, Phase sequency indicator		
OUTPUT	i uses, voice	age & Frequency tolerance, input power limit, Friase	sequency mulcator
Power (kW)	270	360	450
Power factor (**)	270	0.9	430
Voltage	380/400 VAC 3F + N, ± %1		
Frequency	50Hz / 60Hz		
Frequency tolerance	Line synchronized: ± 2% (adjustable) / Free running: ± 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		≤ 2% (linear load), ≤ 5% (non-linear load)	
BATTERIES			
Гуре	VRLA AGM / GEL / NiCd		
Number of batteries	2x30 (± 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)	
GENERAL			
Standards	EN62040-1, EN62040-2, EN62040-3		
User interface	TFT panel, 5 vector buttons, Buzzer		
ndicators	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		
nputs	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		
·	0°€ - 40°€ IP20		
Protection degree			
Relative humidity	90% max. (non-condensing)		
Altitude	< 1000m above sea level		
Acoustic noise		< 68 dBA	
Weight (kg)	635	680	890
Dimensions (mm) HxWxD	1975x880x848	200	00x1243x874
OPTIONS			
Different input / output voltage	Please ask		
Transformer	Galvanic isolation transformer at the input & output		
	T-Mon Admin Multi UPS monitoring 10-50-100-200 clients, T-Mon Server 50-100-200 clients		
Software	T-Mon Admin N	Multi UPS monitoring 10-50-100-200 clients, T-Mon S	erver 50-100-200 clients

 $<sup>(\</sup>mbox{\ensuremath{^{*}}})$  Depending on power and input/output conditions.

<sup>(\*\*)</sup> Please ask for PF 0.8 and 1.0

<sup>(\*\*\*)</sup> The waiting times for excessive loads vary depending on the ambient temperature.