



10 - 400 kVA

DS POWER H SERIES

UNINTERRUPTIBLE POWER SUPPLIES

3 phase in / 3 phase out

3 LEVEL TECHNOLOGY IGBT RECTIFIER DSP CONTROL

The new 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
- 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
- Manufactured according to EC Directive; EN62040
- 5 years spare parts support
- 2 years warranty





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TECHNICAL SPECIFICATIONS

MODEL	DS310H	DS315H	DS320H	DS330H	DS340H	DS360H	DS380H	DS3100H	DS3120H	DS3160H	DS3200H	DS3250H	DS3300H	DS3400H
Power (kVA)	10	15	20	30	40	60	80	100	120	160	200	250	300	400
INPUT														
Voltage	380/400 VAC 3P + N + G ± 20% (at 100% load) / - 40% (at 70% load)													
Frequency	50Hz / 60Hz, ± 5%													
Power factor	≥ 0.99 (at 100% load)													
(THDI) (*)	≤ 3%													
By-pass voltage	380/400 VAC 3 Phase + N, ± 10%													
Voltage distortion	≤ 10%													
Protection	Fuses, Voltage & Frequency tolerance, Input power limit, Phase sequency indicator													
OUTPUT														
Power (kW)	9	13,5	18	27	36	54	72	90	108	144	180	225	270	360
Power factor	0,9 (0,8 and 1 optional)													
Voltage	380/400 VAC 3P + N, ± 1% (415 VAC optional)													
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	≤ 3% (at 100% linear load)													
BATTERIES														
Type	VRLA AGM / GEL / NiCd													
Number of batteries	2x30 (±30): 60 pieces													
Charge voltage	2x405 VDC													
End of discharge voltage	2x300 VDC													
Battery cabinet	Internal							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	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	< 57dBA				< 62dBA				< 65 dBA				< 68dBA	
Weight without batteries (kg)	87	87	91	100	173	197	209	220	232	265	470	525	635	680
Dimensions (mm) HxWxD	1040x400x815				1440x515x855						1900x880x775		1900x1250x775	
OPTIONS														
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), USB Alarm Logger, TCP/IP, GSM/GPRS Modem, Comport multiplexer													
Parallel operation	Up to 8 units													

(*) Depending on power and input/output conditions