



•INDUSTRY•

•MEDICAL•

•DATA CENTER•

•TRANSPORT•

•MALLS•

# DS POWER 300HT

## UNINTERRUPTIBLE POWER SUPPLIES

### 10-500kVA

3 PHASE IN / 3 PHASE OUT

➔ INVERTER ISOLATION TRANSFORMER

➔ IGBT RECTIFIER

➔ DSP CONTROL



TOWER



UPS ONLINE



POWER FACTOR



SERVICE / TECH.  
SUPPORT



ECO FRIENDLY



DS Power 300HT Online UPS uses the latest DSP technology, which can be programmed to suit a wide variety of electrical environments without impeding its performance. With the 3-Level topology, efficiency, reliability and functionality have been raised to levels unattainable with old 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. Thanks to its built-in inverter isolation transformer, it guarantees safe operation and provides uninterrupted energy for local networks, communication systems, sensitive medical devices, smart engineering measurement devices and industrial automation systems.

## GENERAL SPECIFICATIONS

- Inverter isolation transformer
- 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 (THD)
- High input power factor
- High efficiency up to 94%
- 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 (40-500kVA)
- Cold start function
- Compliant with IEC EN62040 directive
- Conforms to CE, TSE and GOST standards
- ISO9001, ISO14001 compliant production
- EMI/RFI input and output filter
- Advanced control at the input
- 3 level battery protection
- Temperature compensated charge system
- Output current limitation
- Output DC leakage protection
- Output short circuit and overload 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	DS310 HT	DS315 HT	DS320 HT	DS330 HT	DS340 HT	DS360 HT	DS380 HT	DS3100 HT	DS3120 HT	DS3160 HT	DS3200 HT	DS3250 HT	DS3300 HT	DS3400 HT	DS3500 HT	
Power (kVA)	10	15	20	30	40	60	80	100	120	160	200	250	300	400	500	
<b>INPUT</b>																
Voltage	380/400 VAC 3P + N + G, $\pm 20\%$															
Frequency	50Hz / 60Hz, $\pm 10\%$															
Power factor (@ 100% load)	$\geq 0.99$															
(THDI) (*)	$\leq 3\%$															
By-pass voltage	380/400 VAC 3 Phase + N, 4 Wires, $\pm 10\%$															
Protection	Fuses, Voltage & Frequency tolerance, Input power limit, Phase sequence indicator															
<b>OUTPUT</b>																
Power (kW)	9	13,5	18	27	36	54	72	90	108	144	180	225	270	360	400	
Power factor	0.9														0.8	
Voltage	380/400 VAC 3P + N, $\pm 1\%$															
Frequency	50Hz / 60Hz															
Frequency tolerance	Line synchronized: $\pm 2\%$ / Free running: $\pm 0.1\%$															
Efficiency	up to 94%															
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															
Nominal voltage	$\pm 336$ VDC															
Number of batteries	2x28 batteries															
Float charge voltage	$\pm 378$ VDC															
End of discharge voltage	$\pm 280$ VDC															
Battery cabinet	External															
Battery ambient temp.	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					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	< 57dBA		< 62 dBA			< 64 dBA			< 68 dBA			72 dBA				
Net weight (kg)	187	198,5	244	270	393	457	536	539	595	647	910,5	1150	1283	1497	2402	
Dimensions (mm) HxWxD	1040x400x815				1440x515x855				1770x825x855				1900x1250x1055			2020x2250x770
<b>OPTIONS</b>																
Different input/output voltage	Please ask															
Transformer	Galvanic isolation transformer at input (optional)															
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.