

# DS-300T SERIES

Uninterruptible Power Supply  
10-500 kVA



## IGBT RECTIFIER DSP CONTROL WITH OUTPUT ISOLATION TRANSFORMER

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

- Galvanic isolation at output
- External input isolation transformer (optional)
- Low input current total harmonic distortion (THD)
- High input power factor
- High efficiency up to 93%
- 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
- 10 years spare parts support
- 2 years warranty

# Specifications

MODEL	DS310T	DS315T	DS320T	DS330T	DS340T	DS360T	DS380T	DS3100T	DS3120T	DS3160T	DS3200T	DS3250T	DS3300T	DS3400T	DS3500T	
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 ± 20% (415 VAC + 15%, -25% optional)															
Frequency	50 Hz / 60 Hz, ± 5%															
Power factor	≥ 0,99															
(THDI)(*)	≤ 3%															
By-pass voltage	380 / 400 VAC 3 Phase + N, 4 Wires, ± 10%															
Voltage distortion	≤ 10%															
Protection	Fuses, Voltage & Frequency tolerance, Input power limit, Phase sequency indicator															
<b>OUTPUT</b>																
Power(kW)	9	13,5	18	27	36	54	72	90	108	144	180	225	270	360	450	
Power Factor	0,9															
Voltage	380/400 VAC 3P + N, ± %l (415 VAC optional)															
Frequency	50Hz/ 60 Hz															
Frequency tolerance	Line synchronized: ± 2% / Free running: ± 0,1%															
Efficiency	up to 93%															
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)															
<b>BATTERIES</b>																
Type	VRLA AGM / GEL / NiCd															
Nominal voltage	± 312 VDC (2x26 batts)															
Float /End of discharge voltage	± 351 VDC / ± 260 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, 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		< 62dBA		< 64dBA		< 68dBA			< 72dBA						
Weight (kg)	187	198,5	244	270	393	457	536	539	595	647	910.5	1150	1283	1497	1702	
Dimensions (mm) HxWxD	1040x400x815				1440x515x855			1770x825x855			1900x1250x1055					
<b>OPTIONS</b>																
Different input/output voltage	Please ask															
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( RS485or TCP/ IP), USB Alarm logger, TCP/IP, GSM/GPRS Modem, Com port multiplexer															
Parallel Operation	UP to 8															