

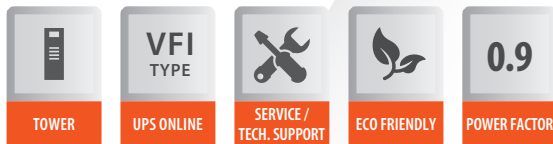
## DS POWER T-HF1

10-80kVA

IGBT Rectifier and DSP Control

Inverter Isolation Transformer

40 Pcs. Battery



DS Power T-HF1 Online UPS is designed for harsh working conditions. With the latest DSP technology, which can be programmed to suit a wide variety of electrical environments, 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. It provides additional protection for your loads with the galvanic inverter isolation transformer. Thanks to its low battery working structure (40 pcs.), it ensures that your total costs of ownership costs such as storage, commissioning, laboring and maintenance are minimized.

## GENERAL SPECIFICATIONS

- 3 DSP controlled modular structure
- Galvanic inverter isolation transformer
- Separate main control board advantage for rectifier and inverter
- DSP controlled 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 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 LCD front panel and mimic led diagram
- 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	DS310T-HF1	DS320T-HF1	DS330T-HF1	DS340T-HF1	DS360T-HF1	DS380T-HF1
Power (kVA)	10	20	30	40	60	80
<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 (at 100% load)	$\geq$ 0.99					
THDI (*)	$\leq$ 3%					
By-pass voltage	380/400 VAC 3 Phase + N, $\pm$ 10%					
Protections	Fuses, Voltage & Frequency tolerance, Input power limit, Phase sequency indicator					
<b>OUTPUT</b>						
Power (kW)	9	18	27	36	54	72
Power factor	0.9					
Voltage	380/400 VAC 3P + N, $\pm$ 1%					
Frequency	50Hz / 60Hz					
Frequency tolerance	Line synchronized: $\pm$ 2% (adjustable) / Free running: $\pm$ 0.1%					
Efficiency (@ 100% load)	up to 94%					
Crest factor	3:1					
Overload capacity	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					
VoltageTHD	$\leq$ 2% (at 100% linear load)					
<b>BATTERIES</b>						
Type	VRLA AGM / GEL / NiCd					
Number of batteries	40 pieces (adjustable)					
Charge voltage	540 VDC					
End of discharge voltage	400 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					
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 ranges	0°C - 40°C					
Protection degree	IP20					
Relative humidity	90% max. (non-condensing)					
Altitude	< 1000m above sea level					
Acoustic noise	< 57 dBA	< 62 dBA			< 64 dBA	
Weight (kg)	187	244	270	393	457	536
Dimensions (mm) HxWxD	400x815x1040			515x855x1440		
<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						