DSP POWER H

10-100kVA

3-Level Technology

IGBT Rectifier

DSP Control

TOWER | **VFI TYPE** UPS ONLINE | **SERVICE / TECH. SUPPORT** | **ECO FRIENDLY** | **0.9 POWER FACTOR**

DSP 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 (40-100kVA)
- Optional 0.8 and 1.0 output power factor (PF)
- Cold start function
- 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	DSP310H	DSP315H	DSP320H	DSP330H	DSP340H	DSP360H	DSP380H	DSP3100H
Power (kVA)	10	15	20	30	40	60	80	100
INPUT								
Voltage	380/400 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%							
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
Power factor (**)	0.9							
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% (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	25ºC							
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				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, Overcurrent, Temperature high alarm							
Temperature range	0ºC - 40ºC							
Protection degree	IP20							
Relative humidity	90% max. (non-condensing)							
Altitude	< 1000m above sea level							
Acoustic noise	< 57dBA				< 62dBA			< 65dBA
Weight (kg)	87	87	91	100	173	197	209	220
Dimensions (mm) HxWxD	1040x400x815				1440x515x855			
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), TCP/IP, GSM/GPRS Modem, Comport multiplexer							
Parallel operation	Up to 8 units							

(*) Depending on power and input/output conditions / (**) Please ask for PF 0.8 and 1.0