

DS POWER 110 SERIES

Uninterruptible Power Supplies

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
- Low input current total harmonic distortion (THD)
- High input power factor
- High efficiency up to 94%
- Cold start function
- Static and maintenance by-pass switch
- Output short circuit and overload protection
- External REPO switch input
- 192 events memory (92 events 4500 alarms)
- Clock and calendar (battery supported)
- Automatic battery test, remaining battery time indicator
- Temperature compensated charge system
- Regenerative backfeed function
- 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
- 2 years warranty
- 10 years spare parts support
- Manufactured according to EC Directive; EN62040
- Full digital structure
- Small footprint
- Economode operation
- 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 features

Reliable Power

Technical Specifications

MODEL	DS305-110	DS310-110	DS315-110	DS320-110	DS330-110	DS340-110	DS350-110	DS360-110	DS380-110	
Power (kVA)	5	10	15	20	30	40	50	60	80	
INPUT										
Voltage	200/208 VAC three-phase + N, ± 20% (220VAC +15% -25%)									
Frequency	50Hz or 60Hz selectable, ± 5Hz									
Power factor	> 0,99									
Harmonic current distortion	≤ 4% *									
Protection	fuses, voltage tolerance, frequency tolerance, input power limit									
By-pass voltage	200/208/220 VAC three-phase + N, ± 10%									
By-pass protection	short circuit, voltage tolerance, frequency tolerance, VAT transfer									
OUTPUT										
Power factor	0,9									
Voltage	200/208/220 VAC three-phase + N, ± 1%									
Frequency	50Hz or 60Hz (selectable)									
Frequency tolerance	line synchronized: ± 2% / Free running: ± 0,1% (adjustable)									
Efficiency	up to 94%									
Crest factor	3:1									
Overload protection	100-125% for 10min, 125-150% for 1min, >150% load: by-pass									
Other protections	Advanced short circuit, voltage tolerance, DC balance, regenerative load, current limiting									
THD (at 100% linear load)	< 3%									
BATTERIES										
Type	VRLA AGM / GEL / NiCd									
Nominal voltage	± 192 VDC									
Float / End of disch. voltage	± 216VDC / ± 160VDC									
Battery housing	Internal						Battery cabinet			
Battery ambient temp. °C	25 °C									
Protections	3 level alarm, battery fuses, charging current limit, temperature compensation(opt.)									
Automatic testing	Standard every 72 hours(adjustable)									
GENERAL										
Standards	EMC(2004/108/EC) / LVD(2006/95/EC) - EN62040-1, EN62040-2, EN60950									
User interface	4 lines LCD panel, Mimic leds, 5 vector buttons, Buzzer, graphical touch-panel (opt.)									
Indicators	P-N voltage, P-P voltage, Current, Power, Crest factor, Frequency ,PF, Service time									
Advanced	Self diagnostics, 4 maintenance time indicators, Calibration over RS232									
Communication	2 x RS232 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 192 events, (optional 512 events)									
Protections	Power module over-temperature, Over current, Temperature high alarm									
Temperature range	0 °C - 40 °C									
Protection degree	IP20 (other, on request)									
Humidity / Altitude	90% max (noncondensed) / <1000m above sea level									
Acoustic noise	≤ 57 dBA	≤ 62 dBA			≤ 64 dBA		≤ 68 dBA			
Weight (kg.)	87	91	100	173	180	194	216	258		
Dimensions (mm) HxWxD	1035x400x810				1440x515x850					
OPTIONS										
Input / Output voltage	Other special input/output voltages									
Transformer	Galvanic isolation transformer at the input & output									
Software	T-Mon Admin Multi UPS monitoring, T-Mon Server 50-100-200 clients, DLOG log loader									
Comm. adaptors	SNMP, MODBUS, RS485, Remote Panel									
Parralel operation	Up to 8 UPS									
(*) Depending on power and input/output conditions.										