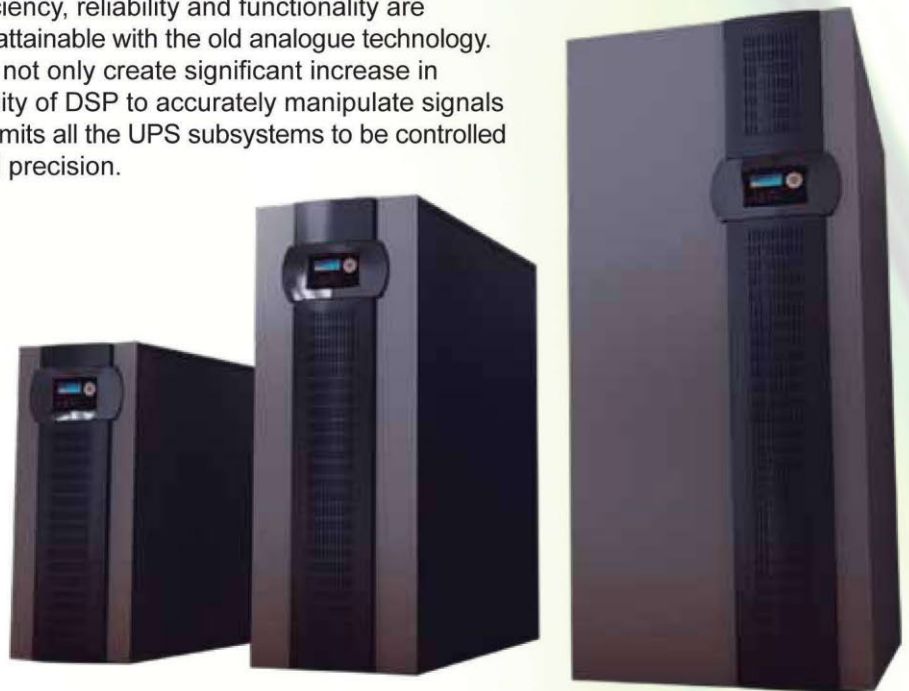


## DS | Power SERIES

Uninterruptible Power Supplies

### IGBT RECTIFIER DSP CONTROL

The new Prowave 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 (192 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 and touch panel
- 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

## Technical Specifications

MODEL	DS310	DS315	DS320	DS330	DS340	DS360	DS380	DS3100	DS3120	
Power(kVA)	10	15	20	30	40	60	80	100	120	
<b>INPUT</b>										
Power factor / THDI	> 0.98 / < 5%									
Voltage	380-400 VAC 3 Phase, 4 Wires, + Earth +/- 20% (240/415VAC +15%, -25%)									
Frequency	50Hz / 60Hz selectable, +/- 5%									
By-pass Voltage	380-400 VAC 3 Phase, 4 Wires, +/- 20%									
By-pass Protection	Short circuit, Voltage tolerance, Frequency tolerance, VAT transfer									
Voltage Distortion	< 10%									
Protection	Fuses, Voltage & Frequency tolerance, Input power limit, Input PFC									
<b>OUTPUT</b>										
Power (kW)	9	13,5	18	27	36	54	72	90	108	
Power factor	0,8 (optional 0,9)									
Voltage	380-400 VAC 3 Phase, 4 Wires, + Earth, +/- 1%									
Frequency	50Hz / 60Hz selectable									
Frequency tolerance	Line synchronized: +/- 2% / Free running: +/- 0,2% (adjustable)									
Efficiency	up to 94%									
Crest Factor	3:1									
Overload Protection	100% - 125% load: 10 min, 125% - 150% load: 1 min, >150% load: by pass (adjustable)									
Other Protections	Advanced short circuit, Voltage tolerance, DC balance, Regenerative load, Current limiting									
THD (at 100% linear load)	< 3%									
<b>BATTERIES</b>										
Type	Sealed Lead Acid - Maintenance free									
Number of batteries	2 x 30 (+/-30) : 60 batteries									
Float charging voltage	2 x 405 VDC									
End of discharge voltage	2 x 300 VDC									
Battery cabinet	Internal					External Cabinet				
Battery ambient temp. °C	25 °C									
Protections	3 level alarms, Battery fuses, Charging current limit, Temperature compensation									
Automatic testing	Standard every 72 hours (adjustable)									
<b>GENERAL</b>										
Regulations	EN62040-2									
User Interface	4 lines LCD panel, Mimic leds, 5 vector buttons, Buzzer, Optional graphical touch-panel									
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									
Humidity / Altitude	90% max (noncondensed) / < 1000 m above sea level									
Acoustic noise	< 57 dBA		< 62 dBA			< 64 dBA		< 68 dBA		
Weight (kg.)	113	113	124	170	195	175	185	380	374	
Dimensions (mm) HxWxD:	1040x400x810					1440x515x850				
<b>OPTIONS</b>										
Input	110/208 VAC									
Output	110/208 VAC									
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									
Adaptors	SNMP, MODBUS, RS485, Remote Panel									
Parallel operation	July 2012									