



100 - 800 kVA

DS POWER EFFICIENT SERIES

UNINTERRUPTIBLE POWER SUPPLIES

3 phase in / 3 phase out

GENERAL SPECIFICATIONS

HE-High Efficiency

DS Power Efficient Series is available from 100 to 800 kVA. The UPS feature a new on-line double-conversion technology utilising IGBT and DSP (Digital Signal Processor) control to provide maximum protection, power quality and green energy for any type of application including primary datacenters, disaster recover sites, telecoms rooms, industrial processes and security applications. High efficiency stands for higher active power available if compared with legacy UPS thanks to output unitary p.f. Nominal power is granted with no downgrading independently from operating temperature.

Zero impact source

DS Power Efficient has a zero impact on connected power sources - grid networks or generators:

- $\leq 3\%$ input current distortion
- Input power factor 0,99
- power walk-in function - to ensure a progressive rectifier start-up
- start-up delay function - to restart the rectifier when the mains power supply is restored.

Smart Grid Ready UPS

DS Power Efficient series UPS are 'Smart Grid Ready' and can be used within an energy storage solution, whilst simultaneously operating at the highest levels of efficiency and automatically selecting the most efficient operating mode based on the state of the lower grid network or generator supply. The UPS are designed to electronically interface with energy management systems within an 'intelligent' Smart Grid application.

Advanced supervision

DS Power Efficient series UPS have a front panel graphic display providing UPS information, measurements, status updates and alarms in different languages, with wave form displays including voltage/current and provide a kWh reading that can be used to measure IT loads and calculate a datacenter PUE (power usage effectiveness) ratio.

Battery care system

DS Power Efficient series UPS include a range of features designed to prolong battery life and reduce their usage.

Output isolation transformer

- Better load protection from DC/Battery problems
- The UPS can be supplied from 2 independent lines
- Fault on DC bus will not affect the by-pass availability
- High Short circuit current
- Higher immunity to harmonics or energy backfeed generated by the load.



Tescom®





100 - 800 kVA

TECHNICAL SPECIFICATIONS



MODEL	DSE 100	DSE 120	DSE 160	DSE 200	DSE 250	DSE 300	DSE 400	DSE 500	DSE 600	DSE 800
Capacity (kVA)	100	120	160	200	250	300	400	500	600	800
INPUT										
Nominal voltage	380/400/415 VAC 3P + N + G									
Frequency	45-65Hz									
Power factor	≥ 0.99									
THDI	≤ 3%									
Frequency tolerance	± 2% (selectable from ± 1% to ± 5% from front panel)									
OUTPUT										
Nominal power (kVA)	100	120	160	200	250	300	400	500	600	800
Active power (kW)	100	120	160	200	250	300	400	500	600	800
Nominal voltage	380/400/415 VAC 3P + G (selectable)									
Voltage tolerance	± 1% (static), ± 5% (dynamic - 10ms)									
Voltage THD	< 1% with linear load / < 3% with non-linear load									
Crest factor	3:1									
Frequency stability on batt	0.05%									
Frequency	50Hz / 60Hz (selectable)									
Efficiency (100% load)	≥ 95%									
Overload capacity	110% for 60'; 125% for 10'; 150% for 1'									
BATTERY										
Type	VRLA AGM / GEL; NiCd; Supercaps; Li-ion; Flywheels									
Battery number	40x12V (480 VDC)									
Ripple current	Zero, "0"									
Charge voltage compensation	0.5 V x °C									
GENERAL										
Net weight (kg)	730	785	865	990	1090	1520	1670	2500	2830	3950
Dimensions (mm) WxDxH	800x850x1900		1000x850x1900			1500x1000x1900		2100x1000x1900		3200x1000x1900
Remote signals	volt-free contacts (configurable)									
Remote control	ESD and bypass (configurable)									
Communication	Double RS232 + remote contacts + 2 slots for communications interface									
Ambient temperature	0°C - 40°C									
Double conversion efficiency	up to 95,5%									
Smart active efficiency	> 99%									
Relative humidity	< 95% (non-condensing)									
Colour	Dark grey RAL 7016									
Noise level	63-68 dBA					70-72 dBA				
Protection level	IP20 (others upon request)									
Regulations	Safety: EN 62040-1 (directive 2006/95/EC); EMC: EN 62040-2 (directive 2004/108/EC)									
Classification according to IEC 62040-3	(Voltage Frequency Independent) VFI - SS - 111									