

# DS PLUS Series

Three Phase UPS  
10KVA-200KVA

## FEATURES

- DSP Technology
- Output power factor 1.0
- Active power correction
- Emergency power off
- Dual AC input
- Optimal isolation transformer
- Parallel Operation up to 4 Units
- Adjustable battery numbers
- Power walk-in function on parallel more than 80KVA
- Efficiency 94.5%
- Small footprint



UPS DS PLUS 3/3 is a reliable solution signed by Delta Electronix The range DS PLUS 3Ph/3Ph uses double conversion technology to provide clean, high level quality power to fully protect mission-critical devices, such as communications networks, small computer centers, servers, telecoms applications and industrial applications DSP technology A DSP controller provides an improved and cost-effective solution with high performance

### Flexible design for batteries

The number of batteries is adjusted according to the power requirements. This feature allows the UPS to continue to operate even if some batteries are damaged.

### 50/60 Hz Frequency Converter Mode

Lock output frequency at 50Hz or 60Hz independently of the input frequency.



### Output power factor 1

For critical applications the online three-phase UPS with output power factor 1.0 ensures higher and upgraded Performance.

### Double input

DS PLUS 3/3 is available optional and with double input for higher flexibility in system configuration.

### Emergency Power Off (EPO) Function

This feature can secure the personnel and equipment in case of emergency.

### Active power factor correction in each phase

The power factor correction is active at all periods and increases the input performance.

### Powerful charger

The DS PLUS 3/3 series has a built-in powerful charger with long-term support capabilities, when connected to a high-capacity external battery pack.



MODEL	DS Plus310	DS Plus320	DS Plus330	DS Plus340	DS Plus360	DS Plus380	DS Plus3100	DS Plus3120	DS Plus3180	DS Plus3200
Capacity	10KVA	20KVA	30KVA	40KVA	60KVA	80KVA	100KVA	120KVA	180KVA	200KVA
<b>INPUT</b>										
Nominal Voltage	380/400/415Vac, 3Ph+N+PE									
Operating Voltage Range	110-300Vac for 50%load, 175-276Vac for full load									
Operating Frequency Range	40-70Hz									
Power Factor	$\geq 0.99$ @ 100% Load									
THDi	<4% ( 100% linear load )					<3% ( 100% linear load )				
Generator input	Support									
<b>OUTPUT</b>										
Output voltage	380/400/415Vac, 3Ph+N+PE									
Voltage regulation.	$\leq \pm 1\%$ Typical (balanced load, $\leq \pm 2\%$ Typical (unbalanced load)									
Power Factor	1									
Output frequency	Line Mode: synchronize with input, when input frequency $> \pm 10\%$ ( $\pm 1-5\%$ optional), output (50/60 $\pm 0.1$ ) Hz Battery Mode: (50/60 $\pm 0.1$ ) Hz									
Crest factor	3 : 1									
THDv	$\leq 2\%$ THD (Linear Load) $\leq 4\%$ THD (Non-linear Load)									
<b>BYPASS</b>										
Nominal Voltage	3 x 380/400/415 VAC (3Ph+N)									
Voltage Range	- 30% ~ +20%									
Frequency Range	46Hz ~ 54Hz or 56Hz ~ 64Hz									
Overload Capability	$\leq 110\%$ for 1 hour, 111% ~ 125% for 10 mins, 126%~150% for 1 min and >150% for 200ms									
<b>Efficiency</b>										
AC Mode	95%					95.50%				
ECO Mode	98%					98.50%				
Battery Mode	94%					94.50%				
<b>BATTERY</b>										
Battery voltage	+/- 120V	+/- 192V				+/- 192V : +/- 240V (selectable)				
Floating Charge Voltage	2.28V / Cell (2.25 ~2.33 Selectable)									
Boost Charging Voltage	2.35V/Cell									
Temperature Compensation	Yes									
Charge Current (A) Adjustable	12A	12A	12A	12A	18A	24A	24A	36A	54A	54A
<b>System Features</b>										
Transfer time	Utility to Battery: 0ms, Utility to bypass: 0ms									
Over load	$\leq 110\%$ for 1 hour, 111% ~ 125% for 10 mins, 126%~150% for 1 min and >150% for 200ms									
Backfeed protection	Support									
Alarm	over load, utility abnormal UPS fault, battery low, high and low Voltage									
Protection	short circuit overload, over temperature, battery low fan fault. Alarm									
Remot LCD	Support									
Communication	USB, RS485, Parallel port, Coupler dry. Contact, Intelligent slot, SNMP, card (option), relay. Card (option)									
<b>ENVIRONMENTAL</b>										
Operating Temperature	0-40 C									
Storage temperature	25-55 C ( No battery )									
Humidity	0-95% (non condensing)									
Altitude	< 1000m. When>1000m									
<b>PHYSICAL</b>										
Dimension D x W x H (Cm)	63X25X83		82X30X100		100x32x80	100x43x120	100x43x120	100x43x120	100x60x120	100x60x120
Net weight (Kg)	37	43	55	58	88	169	169	169	249	249
<b>STANDARDS</b>										
Safety	IEC/EN 62040-1									
EMC	IEC/EN 62040-2 Category C3									

