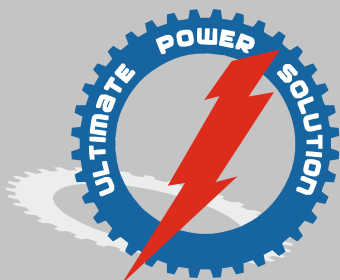
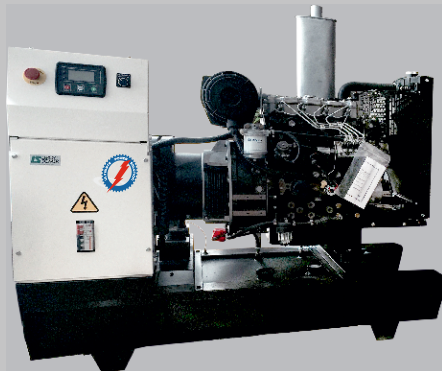


# Ultimate Power Solution Group

## YOUR WAY FOR Power



**UPS**  
GENERATORS

**Perkins**

**DOOSAN**

**Cummins**

**LISTER  
PETTER**

**LEROY  
SOMER**

**DEUTZ**



# Ultimate Power Solution

## COMPANY PROFILE :

*Your Way For Power*

Ultimate Power Solution provides a wide range of high quality products and services geared to our customers' specific needs and requirements.

Ultimate Power Solution is one of the leaders in supply, logistics and service providers for UAE, GCC countries, the foreign assistance missions, ISAF, NATO, UN OFFICES, NGO's and EMBASSIES.

Our success is owed to our hardworking, highly skilled and committed employees. Our team is led by a professional and dedicated management group. We specialize in product sales, rental, services & aftermarket service.

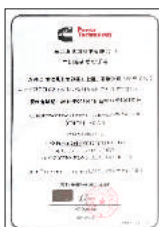
When power needs are more challenging than normal specifications, Ultimate Power Solution is dedicated to providing solutions that meet complex power requirements. All solutions and products are designed to meet the unique needs of each customer on a project - to - project basis.

## ULTIMATE POWER SOLUTION NETWORK :

- ❗ Ultimate Power Solution Ltd - British Virgin Island
- ❗ Ultimate Power Solution FZC - Sharjah, United Arab Emirates
- ❗ Ultimate Power Solution LLC - Moscow, Russia
- ❗ UPS Power Solution (Shanghai) LLC - Shanghai, China

## OUR PRODUCTS :

- ❗ Gasoline portable gen-sets 2.2 - 10
- ❗ Diesel gen - sets 8 - 2,500 KVA
- ❗ Gas turbine - Gas gen-sets (including CHP-units)
- ❗ Marine auxiliary gen-sets, Onan Marine gen-set
- ❗ Mobile gen-set
- ❗ Heavy Fuel Power Stations
- ❗ Wind Turbine
- ❗ Hydro generators
- ❗ High quality products are ensured for all customers by means of:
  - Skilled and experienced workforce
  - High quality components



The following Internationally proven engines and alternators are used in the production:



## MOBILE LIGHTING TOWER

- ❶ Hand winch
- ❷ Automatic mast lock
- ❸ 4 x 1000 watts Metal Halide Lamps

## ALL KINDS OF GENSET ACCESSORIES SUCH AS :

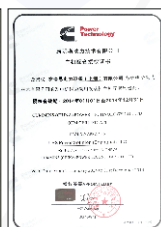
- ❶ SOUND PROOF CANOPIES

All our enclosures have the following quality features :

- ❷ Totally enclosed exhaust silencing system
- ❸ Robust and highly corrosion resistant construction
- ❹ Fully weatherproof
- ❺ Excellent access for maintenance
- ❻ Automatic Transfer Switch Panels (or ATS)
- ❼ Synchronizing Panels

## AFTER MARKET SERVICES:

- ❶ International warranty of 12 months is given for all parts leaving our assembly line.
- ❷ Checklists, maintenance books, spare parts listing and manuals will accompany each unit sold to a customer & properly tested by Ultimate Power Solution's Quality Control team.
- ❸ Shipping with lower cost : one of the critical properties of our products is its controlled weight that allows shipping with lower costs.





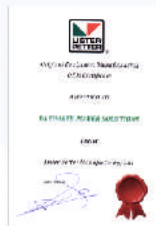
# Ultimate Power Solution

Your Way For Power



## Perkins 50 Hz

Genset Type	Engine	No. of Cyls	Alternator	50 hz / 1500 rpm		Standby		Dimensions and Weight				
				Prime KVA	Prime KW	Standby KVA	Standby KW	Cons L/H	L m	W m	H m	Wght Kg
UPSP10	403A-11G1	3	LSA / TAL040 B	10	8	11	8.8	2.6	1.43	0.69	0.96	314
UPSP15	403A-15G1	3	LSA / TAL040 D	15	12	16.5	13.2	3.7	1.54	0.69	0.96	402
UPSP20	404A-22G1	4	LSA / TAL040 F	20	13.6	19	15.2	5.4	1.65	0.69	0.99	485
UPSP30	1103A-33G	3	LSA / TAL042 B	27	21.6	31	24.8	7.1	1.6	0.76	1.16	772
UPSP45	1103A-33TG1	3	LSA / TAL042 E	40	36	49.6	39.7	10.7	1.9	0.76	1.16	841
UPSP60	1103A-33TG2	3	LSA / TAL042 H	60	48	68.7	55	13.9	1.9	0.76	1.16	882
UPSP80	1104A-44TG2	4	LSA / TAL044 B	80	64	88	70.5	18.7	2.05	0.76	1.3	965
UPSP100	1104C-44TAG2	4	LSA / TAL044 D	101	80.8	110.5	88.4	22.6	2.4	0.76	1.35	1200
UPSP135	1106A-70TG1	6	LSA / TAL044 H	135	108	150	120	31.5	2.5	0.76	1.4	1250
UPSP150	1106A-70TAG2	6	LSA / TAL44.3 L10	150	120	165	132	41	2.5	0.76	1.4	1310
UPSP200-1	1106A-70TAG4	6	LSA 46.2 M5	208	166	229	183	45.2	2.7	0.99	1.72	2100
UPSP200-2	1506A-E-88TAG1	6	LSA 46.2 M5	208	166	229	183	45.2	2.7	0.99	1.72	2100
UPSP250-1	1506A-E-88TAG3	6	LSA / 46.2 L6	250	200	275	220	55	2.9	0.99	1.75	2200
UPSP300	1506A-E88TAG5	6	LSA 4.7	300	240	350	280	68.7	3.4	1.12	1.85	2900
UPSP350	2206C-E13TAG2	6	LSA 47.2 VS2	354	283	400	320	70.6	3.3	1.11	1.62	3150
UPSP400	2206C-E13TAG3	6	LSA 47.2 S4	404	323	453	352	81	3.3	1.11	1.62	3180
UPSP450	2506A-E15TAG1	6	LSA 47.2 M5	467	373	512	409	95	3.7	1.12	1.718	3750
UPSP500	2506A-E15TAG2	6	LSA 47.2 M7	500	400	563	450	100	3.7	1.12	1.718	3760
UPSP625	2806A-E18TAG2	6	LSA 47.2 L9	625	500	675	540	132	3.75	1.53	2.2	4840
UPSP725	4006-23TAG2A	6	LSA 49.1 M6	725	580	800	640	152.8	4.25	1.65	2.29	6100
UPSP800	4006-23TAG3A	6	LSA 49.1 M75	800	640	880	704	167.4	4.25	1.65	2.29	6300
UPSP1000	4008-TAG2A	8	LSA 49.1 L11	1022	818	1125	900	226	4.9	1.87	2.26	7510
UPSP1250	4012-46TWG2	12	LSA 502 M6	1271	1017	1403	1122	265	4.9	1.87	2.31	9000
UPSP1500	4012-46TAG2	12	LSA 50.2 L8	1500	1200	1650	1320	306	5.25	2.25	2.75	10300
UPSP2000	4016-TAG2A	16	LSA 51.2 M60	2000	1600	2250	1800	436	6.45	2.78	3.24	15100







## Perkins 60 Hz

Genset Type	Engine	No. of Cylds	Alternator	60 hz / 1800 rpm		Dimensions and Weight						
				Prime KVA	Prime KW	Standby KVA	Standby KW	Cons L/H	L m	W m	H m	Wght Kg
UPSP10	403D-11G	3	LSA / TAL040 B	11.4	19	12.4	9.9	3.3	1.43	0.69	0.96	314
UPSP15	403D-15G	3	LSA / TAL040 D	16.1	12.9	17.5	14	4.3	1.54	0.69	0.96	402
UPSP20	404D-22G	4	LSA / TAL040 F	19	15.2	23	18.4	6.4	1.65	0.69	0.99	485
UPSP30	404D-22TAG	3	LSA / TAL042 B	36.2	29	39.7	31.7	8.6	1.6	0.76	1.16	772
UPSP45	1103A-33TG1	3	LSA / TAL042 E	53.9	43.1	59.6	47.5	12.9	1.9	0.76	1.16	841
UPSP60	1103A-33TG2	3	LSA / TAL042 H	68.7	55	75.4	60.3	16.6	1.9	0.76	1.16	882
UPSP80	1104A-44TG2	4	LSA / TAL044 B	93.4	74.7	102.2	81.7	22.3	2.05	0.76	1.3	965
UPSP100	1104C-44TAG2	4	LSA / TAL044 D	115.4	92.32	126.5	101.2	26.9	2.4	0.76	1.35	1200
UPSP135	1106A-70TG1	6	LSA / TAL044 H	153.6	122.8	167.9	134.3	37.6	2.5	0.76	1.4	1250
UPSP150	1106A-70TAG2	6	LSA / TAL44.3 L10	**	**	**	**	**	2.5	0.76	1.4	1310
UPSP200-1	1106A-70TAG4	6	LSA 46.2 M5	231*	185	253	202	51.5	2.7	0.99	1.72	2100
UPSP200-2	1506A-E-88TAG3	6	LSA 46.2 M5	231*	185	253	202	51.5	2.7	0.99	1.72	2100
UPSP250-1	1306C-E87TAG6	6	LSA / 46.2 L6	245*	196	270	216	67	2.9	0.99	1.75	2200
UPSP250-2	1506A-E-88TAG3	6	LSA / 46.2 L6	245*	196	270	216	67	2.9	0.99	1.75	2200
UPSP300	2306A-E14TAG1	6	LSA 4.7	344	275	379	303	77.4	3.4	1.12	1.85	2900
UPSP350	2206C-E13TAG2	6	LSA 47.2 VS2	406	324	437	350	85.7	3.3	1.11	1.62	3150
UPSP400	2206C-E13TAG3	6	LSA 47.2 S4	442	353	504	403	94	3.3	1.11	1.62	3180
UPSP450	2506A-E15TAG1	6	LSA 47.2 M5	513	410	577	461	102	3.7	1.12	1.718	3750
UPSP500	2506A-E15TAG2	6	LSA 47.2 M7	513	410	578	462	102	3.7	1.12	1.718	3760
UPSP625	2806A-E18TAG2	6	LSA 47.2 L9	638	510	701	560	127	3.75	1.53	2.2	4840
UPSP725	4006-23TAG2A	6	LSA 49.1 M6	750	600	844	675	168.1	4.25	1.65	2.29	6100
UPSP800	4006-23TAG3A	6	LSA 49.1 M75	844	675	938	750	193.5	4.25	1.65	2.29	6300
UPSP1000	4008-TAG2A	8	LSA 49.1 L11	995	796	1098	878	224	4.9	1.87	2.26	7510
UPSP1250	4012-46TWG2	12	LSA 502 M6	1240	992	1371	1097	272	4.9	1.87	2.31	9000
UPSP1500	4012-46TAG2A	12	LSA 50.2 L8	1500	1200	1650	1320	317	5.25	2.25	2.75	10300
UPSP2000	4016-TAG2A	16	LSA 51.2 M60	**	**	**	**	**	6.45	2.78	3.24	15100





# Ultimate Power Solution

Your Way For Power



## Cummins 50 Hz

Gen-Set Type	Engine	No. of Cyls	Alternator	50 hz / 1500 rpm				Dimensions and Weight				
				Prime		Standby		Cons	L	W	H	Wght
				KVA	KW	KVA	KW	L/H	m	m	m	
PSCU10	3A1.4-G1	2	BCI164B	10	8	11	8.8	3.5	1.75	0.63	0.9	540
PSCU15	3A1.4-G1	3	BCI164C	15	12	14.5	11.6	3.7	1.75	0.63	0.9	540
PSCU20	4B3.9-G	4	BCI164E	20	16.3	22.7	18.2	5.4	1.75	0.63	0.9	628
PSCU30	4B3.9-G2	4	BCI164G	30.8	24.6	33.7	27	6.5	1.75	0.63	0.9	628
PSCU45	4BT3.9-G2	4	UCI224D	45	36	49.6	39.7	9.25	1.75	0.63	0.9	685
PSCU62.5	4BTA3.9-G2	4	UCI224E	62.5	50	70	55	14	1.95	0.68	0.9	850
PSCU100	6BT5.9-G1	6	UCI274C	101	80.8	110.5	88.4	22	2.1	0.84	1.38	1260
PSCU125	6BT5.9-G1	6	UCI274E	125	100	138	110	22	2.1	0.84	1.38	1260
PSCU150	6BTAA5.9-G2	6	UCI274F	150	120	165	132	39	2.5	0.76	1.4	1590
PSCU175	6CTA8.3-G2	6	UCI274G	175	140	193	154	42	2.45	0.83	1.53	1600
PSCU200	6CTAA8.3-G1	6	UCI274H	200	160	220	176	45	2.52	0.83	1.53	1600
PSCU250	6CTAA8.3 G2	6	UCD274K	250	200	275	220	50	2.83	0.83	1.53	2200
PSCU275	NTA855-G1	6	HCI444D	275	220	303	242	62.4	3.15	1	1.54	3125
PSCU350	NTA855-G1A	6	HCI444E	354	283	400	320	70.6	3.15	1	1.54	3150
PSCU400	KTA19-G2	6	HCI444F	404	323	453	352	81	3.49	1.15	1.85	4365
PSCU450	KTA19-G3	6	HCI544C	450	360	495	396	100	3.49	1.15	1.85	4368
PSCU500	KTA19-G4	6	HCI544D	500	400	563	450	113	3.49	1.15	1.85	4370
PSCU625	KTAA19-G7	6	HCI544F	625	500	675	540	138	4.4	1.76	2.3	5860
PSCU750	KTA38-G2	12v	HCI634G	750	600	823	660	165	4.4	1.76	2.3	8500
PSCU900	KTA38-G2A	12v	HCI634H	900	720	990	792	200	4.25	1.65	2.29	8500
PSCU1000	KTA38-G5	12v	HCI634J	1000	800	1100	880	220	4.25	1.65	2.29	8890
PSCU1250	KTA50-G3	16v	PI734A	1250	1000	1375	1100	312.5	5.08	1.76	2.42	9753

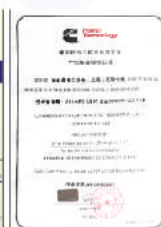






## Cummins 60 Hz

Gen-Set Type	Engine	No. of Cylds	Alternator	60 hz / 1800 rpm		Standby		Dimensions and Weight				
				Prime KVA	KW	KVA	KW	Cons L/H	L m	W m	H m	Wght Kg
PSCU10	3A1.4-G1	2	BCI164B	10	8	11	8.8	3.5	1.75	0.63	0.9	540
PSCU15	3A1.4-G1	3	BCI164C	15	12	14.5	11.6	3.7	1.75	0.63	0.9	540
PSCU20	4B3.9-G	4	BCI164E	20	16.3	22.7	18.2	5.4	1.75	0.63	0.9	628
PSCU30	4B3.9-G2	4	BCI164G	29	23	33	26	6.5	1.75	0.63	0.9	628
PSCU48	4B3.9-G2	4	UCI224D	48	38	55	42	9.25	1.75	0.63	0.9	685
PSCU64	4BTA3.9-G2	4	UCI224E	64	51	70	56	14	1.95	0.68	0.9	850
PSCU119	6BT5.9-G1	6	UCI274C	119	95	135	105	22	2.1	0.84	1.38	1260
PSCU150	6BTAA5.9-G2	6	UCI274F	150	120	165	132	39	2.5	0.76	1.4	1590
PSCU205	6CTA8.3-G2	6	UCI274G	205	164	225	180	42	2.45	0.83	1.53	1600
PSCU257	6ITAA8.3 G2	6	UCD274K	257	205	280	225	50	2.83	0.83	1.53	2200
PSCU300	NTA855-G1	6	HCI444D	300	240	340	270	62.4	3.15	1	1.54	3125
PSCU350	NTA855-G1A	6	HCI444E	354	283	400	320	70.6	3.15	1	1.54	3150
PSCU439	KTA19-G2	6	HCI444F	439	351	500	400	81	3.49	1.15	1.85	4365
PSCU513	KTA19-G4	6	HCI544C	513	410	560	450	100	3.49	1.15	1.85	4368
PSCU563	KTA19-G4	6	HCI544D	563	450	630	501	113	3.49	1.15	1.85	4370
PSCU681	KTAA19-G7	6	HCI544F	681	545	750	600	138	4.4	1.76	2.3	5860
PSCU909	KTA38-G2	12v	HIC634G	909	727	1000	800	165	4.4	1.76	2.3	8500
PSCU1000	KTA38-G2A	12v	HCI634H	1000	800	1100	880	200	4.25	1.65	2.29	8500
PSCU1159	KTA38-G5	12v	HCI634J	1159	927	1275	1020	220	4.25	1.65	2.29	8890
PSCU1400	KTA50-G3	16v	PI734A	1400	1120	1590	1270	312.5	5.08	1.76	2.42	9753



# Ultimate Power Solution *Your Way For Power*

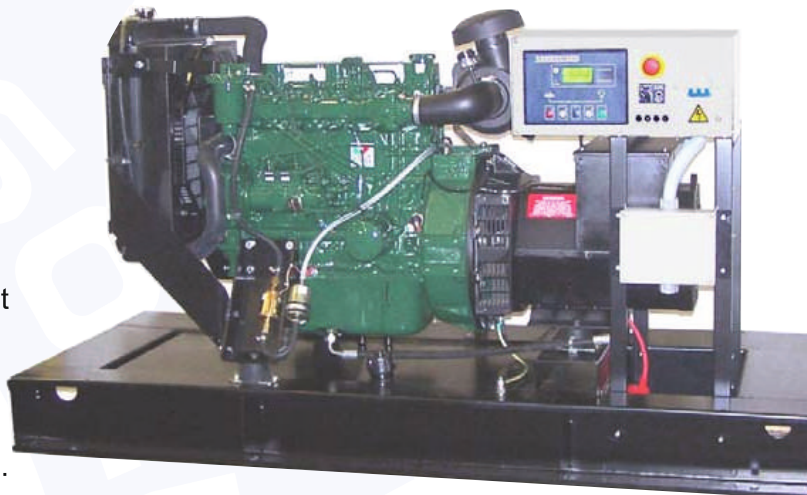


## Water-Cooled Generating Set

LISTER PETTER

### Standard Features:

- Engine and alternator close coupled.
- Anti-vibration mountings between engine/ alternator and base-plate.
- 12 Volt starter battery and leads.
- Control panel containing an output circuit breaker with thermal overload protection and an electronic control module with digital display.
- Emergency stop button (lock down type).
- Operators Handbook.
- Electrical diagram.



### Engine Specification:

- Lister Petter Delta type water-cooled, diesel engine.
- Medium duty air cleaner.
- Lubricating oil and fuel filters.
- Fuel lift pump.
- Engine mounted exhaust silencer (open sets only).
- Residential exhaust silencer (acoustic sets only).
- 12V electric starting system.
- High engine temperature and low oil pressure shut down system.

### Optional Items:

- Residential exhaust silencer on open sets (as fitted to acoustic sets).
- Acoustic canopy kit (including residential silencer kit).
- Basic tool kit.

### Lister Petter Engine Types

DWS4 AT 1500 r/min or 1800 r/min

### Alternator Specification:

- Single bearing, 4 pole brushless alternator.
- Solid state AVR with  $\pm 1.5\%$  voltage regulation as standard.
- Class "H" insulation on the rotor and stator.





# Prime and Standby Power Ratings

**Voltages:** Other voltages are available; refer to Lister Petter.

**Single-Phase** versions available on request.

Rating Definitions to ISO 8528-1

Rating Conditions

A standard generating set is designed to operate in environmental reference conditions of 25°C, 100kPa and 30% humidity.

Prime Power

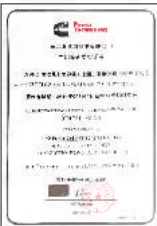
This rating is for the supply of continuous electrical power (at variable load) in lieu of commercially purchased power. There is no limitation on the annual hours of operation and 10% overload power can be supplied for 1 hour in 12 hours.

Standby Power

This rating is for the supply of continuous electrical power (at variable load) in the event of a utility power failure. No overload is permitted.



Model	Genset Specification						Engine Specification					
	KVA		KW		Dimension LxWxH	Weight Kg	Engine Model	Cyl	Capacity C/L	Bore (mm)	Stroke (mm)	Fuel Con. L/h
	Standby	Continuous	Standby	Continuous								
L 10	11	10	8.8	8	1300x500x800	410	LPW 2	2	0.93	86	80	2
L 15	17	15	13.6	12	1300x500x800	450	LPW 3	3	1.39	86	80	3
L 20	22	20	17.6	16	1400x620x900	490	LPW 4	4	1.96	86	80	4
L 25	28	25	22.4	20	1400x620x900	520	LPW T4	4	1.96	86	80	5
L 30	33	30	26.4	24	1600x720x1000	590	DWS 4	4	3.33	86	80	7
L 120	112	102	90	81.6	2400x750x1300	960	LLO 125	6	9.72	116.6	135.9	25
L 140	150	136	120	108.8	2800x800x1450	1150	LLO 150	6	9.72	116.6	135.9	35
L 200	166	150	132	120	2800x800x1450	1250	LLO 200	6	9.72	116.6	135.9	42
L 230	229	208	183	166	2900x1000x1700	2000	LLO 230	6	9.72	116.6	135.9	48
L 250	250	228	200	182	2900x1000x1700	2100	LLO 250	6	9.72	116.6	135.9	52



# Ultimate Power Solution

*Your Way For Power*

## UPS • WAUKESHA UPS GAS GENSET

### UPS /WAUKESHA 140KW-3250KW Series Natural Gas

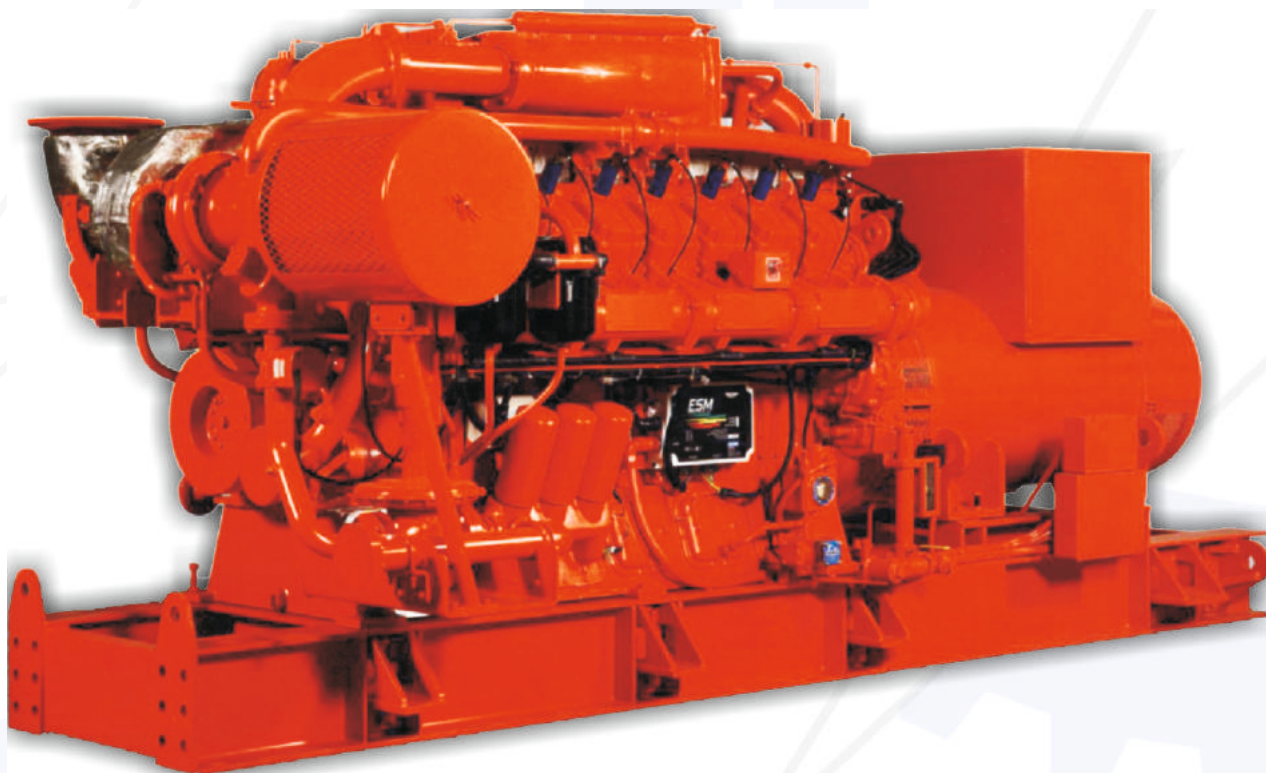
WAUKESHA make series completed natural gas engine series and it design almost car to power and compression requirements of different industrial lines.

WAUKESHA manufactures spark plug ignition gas engines and engine generator. These products are used universally in on- spot air compression, power generation and driving machine. WAUKESHA is the only CFR engine manufacturer authorized on ASTM and the pi in gas generator sets domain.

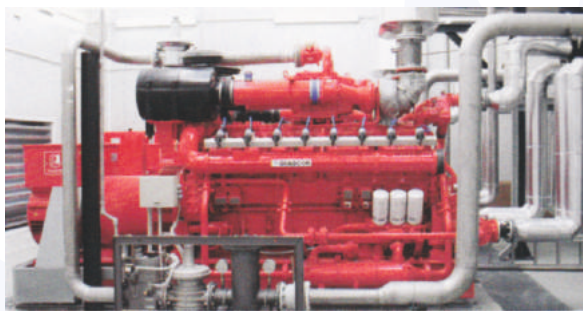
ATGL series the biggest engine for its volume and horsepower is engine's series are designed for duration, strength stableness and driven force. It is well known for its skillfulness and high efficiency.

VGf and VSG series gas engine – enjoying compact design and high speed. It supplies large power but do not occupy much space.

VHP series is the backbone of WAUKESH engine series and the most popular one in the engine family tree, Customer's favorableness enables us to improve on this series engine Reliability and efficiency are always keeping advanced.







UPS		WAUKESHA		Remote radiator cooling(cwe) 50Hz		Only (kWe) 50Hz			
				Continuous		Standby		Continuous	
Engine Family		Model		1000rpm		1000rpm		1000rpm	
<b>ATGL</b> <sup>TM</sup> 10% overload not available		16V-AI27GL 12V-AI27GL BL-AI27GL		3250 <sup>5</sup> 2220 1480		3250 2440 1630		3356 <sup>3</sup> 2335 1560	
Engine Family		Model		1500rpm				1500rpm	
<b>APG</b> <sup>TM</sup>  no overload allowed		APG1000		1000 <sup>7</sup>				1038 <sup>7</sup>	
		Model		1500rpm				1500rpm	
		APG2000 APG3000		2100 <sup>7</sup> 3200 <sup>7</sup>				2200 <sup>7</sup> 3300 <sup>7</sup>	
Engine Family		Model		1000rpm		1000rpm		1000rpm	
<b>VHP</b> <sup>TM</sup>  engine available with low fuel pressure system(lfps) with the same rating refer to page 15 for lfps amvient and attitude adjustments  no overload allowed		VHP9500GSI VHP9500GI VHP7104GSI VHP7104GSID VHP7100GSI VHP7100GSI VHP7100GL VHP7100G VHP5904LT VHP5904LTD VHP5904GSI VHP5904GSID VHP5900G VHP3604GSI VHP3604GSID VHP3600G		1175 1175 1100 <sup>7</sup> 1100 <sup>1.7</sup> 875 875 <sup>1</sup> 875 635 900 <sup>7</sup> 900 <sup>1.7</sup> 900 <sup>7</sup> 900 <sup>1.7</sup> 475 540 <sup>7</sup> 540 <sup>1.7</sup> 315		1450 1295 1100 1100 <sup>1</sup> 1075 1075 <sup>1</sup> 965 710 940 900 <sup>1</sup> 900 900 <sup>1</sup> 525 540 540 <sup>1</sup> 350		1224 1224 1537 1153 <sup>1.7</sup> 919 919 <sup>7</sup> 919 668 947 <sup>7</sup> 947 <sup>1.7</sup> 947 <sup>7</sup> 947 <sup>1.7</sup> 550 573 <sup>7</sup> 573 <sup>1.7</sup> 340	
Engine Family		Model		1500rpm		1500rpm		1500rpm	
<b>VGf</b> <sup>TM</sup>  these power ratings require pricebook option code 1100 (176bmp) and dsm. they are available continuously when applide per WKI power and timing curve s7079 - 19. it is permissible to operate at up to 5% overload for two hours in each 24 hour period. rating is for high compression ratio pistons only.		VGFF48GL VGf48GLD VGf48GLD/2 VGf48GSI/GSD VGf36GL VGf36GLD VGf36GLD/2 VGf36GSI/GSID VGf24GL VGf24GLD VGf24GLD/2 VGf24GSI/GSID VGf18GL VGf18GLD VGf18GLD/2 VGf18GSI/GSID		685 <sup>3</sup> 685 <sup>3</sup> — 625 515 <sup>3.9</sup> 515 <sup>3</sup> — 475 340 <sup>3.9</sup> 340 <sup>3</sup> — 310 250 <sup>3.9</sup> 250 <sup>3</sup> — 230		715 715 — 685 535 <sup>9</sup> 535 — 515 355 <sup>9</sup> 355 — 340 260 <sup>9</sup> 260 — 255		730 <sup>3</sup> 730 <sup>3</sup> 830 660 550 <sup>3.9</sup> 550 <sup>3</sup> 620 500 365 <sup>3.9</sup> 365 <sup>3</sup> 414 330 275 <sup>3.9</sup> 275 <sup>3</sup> 310 250	
Engine Family		Model		1500rpm		1500rpm		1500rpm	
<b>VSG</b> <sup>TM</sup>		VSG11GSI/GSID		140		150		155	



# Ultimate Power Solution

Your Way For Power

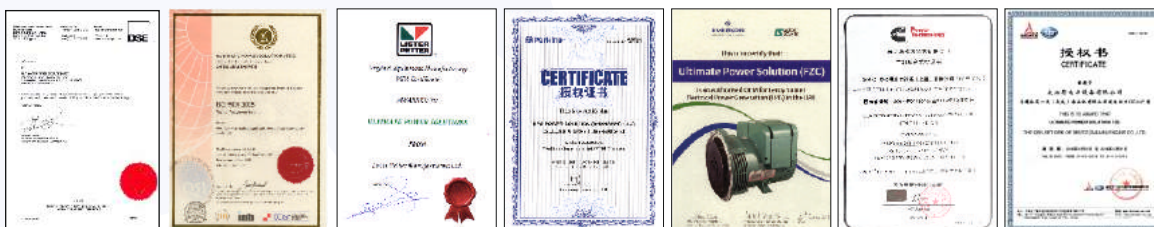
## SYNCHRO SYSTEM

SYNCHRONIZATION deals with synchronizing Diesel Generator or more Diesel Generator with main supply for avoiding production losses. This system gives tripping free operation for precise processes. This system is also used to share the load amongst each DG.

SYNCHRONIZATION, whatever method of paralleling is used the sets must first be synchronized. Synchronism is always determined in the same way; that is, the sin waves must be equal. For the source to be paralleled it must be approximately equal in (1) frequency, (2) voltage and (3) phase rotation. When all three parameters are satisfied and the phase angle difference is close to zero (preferably less than 5 electrical degrees), the source can be paralleled.

SYNCHRONIZING PANEL are mainly designed and used to meet power system requirements. These panels provide manual as well as automatic synchronizing function for one or more generator breaker. They are widely used in synchronizing generators and offers multi flexing solutions. It will be as specified in paragraph Panels and will provide controls, gauges, meters and display to include.

The device is provided with control switches in the front panel. These switches are responsible for manual raising and lowering of speed voltage of the generator to match the bus frequency and voltage before synchronizing. There are volt meters and digital meters in the device that offer generator and bus measurement.





## SYNCHRONIZING PANELS USUALLY CONSIST OF:

### 1. GENERATOR CONTROL UNIT

This unit automatically matches generator frequency and voltage.

### 2. SYNCROCLOSURE UNIT

It sends the closing command to the breaker at the exact moment of phase coincident.

### 3. SYNCROCLOSURE CHECK RELEY

It performs the progressive function of verifying voltage and phase angle conditions and ensuring that they are within preset limits, before allowing the breaker to close.

## SPECIAL PROJECTS..... SPECIAL SOLUTIONS

**Ultimate Power Solution** Generator has become an international brand in special projects that require intensive accumulation of knowledge and experience thanks to its expert engineering team. A generator system's structure consists of different characteristics depending on the needs of the project:

- Control and Synchronization System
- Sound Isolation and Protection System
- Exhaust and Silencer System
- Fuel Systems
- Cooling Systems



**Ultimate Power Solution** Generator has completed complex projects with success that could not be solved previously both from the point of mechanical design and from the point of electrical design. In the next stage the after sales team continues to present the required training, maintenance and spare part services to the customers.



# Ultimate Power Solution

Your Way For Power

## Soundproof canopy

1. Rainproof type
2. Soundproof type
3. Super Soundproof type



All our CANOPY parts are designed with modular principles. All metal CANOPY parts are painted by electrostatic polyester powder paint. The exhaust silencer is protected against environment influences and is thermally insulated. It has an emergency stop mushroom type push button which is installed externally. The CANOPY is easy to lift, move and accessible for any maintenance activity. It is designed to withstand extreme weather conditions and complies with International standards.





**1. The diesel engine:**

Strong power, low fuel consumption.

**2. The start motor:**

To start the engine.

**3. The alternator:**

High reliability and durability.

**4. Cooling System:**

The cooling system consists of heavy-duty radiator, the cooling fan and so on, to ensure the normal operation under the different ambient temperatures. The water inlet on the top of canopy make it easy to add the cooling water.

**5. Muffler:**

The muffler is using the impedance composite muffler, it's effective, low power lost, the general industrial type and the residential type are optional.

**6. Air inlet and exhaust system:**

Adopting the precise design of the air inlet and the exhaust system to meet the ventilation requirements under different environments.

**7. Control panel:**

The control system has a variety of instruments and warning lights. It can show the operation status of the generating set, including the advanced and reliable integrated control module with led screen and a blue backlight.

**8. Base frame:**

The base frame is a high-intensity seismic structure. It can reduce the deformation of the base due to the shock and self-weight, even if the installed plane of generating set is not very good. This high-strength structure can ensure the overall quality of assembly, equipped with forklift slots, easy to transport. At the same time, the base frame have a shock absorber, that can effectively reduce the vibration amplitude of the generating set to extend the working life and reduce the maintenance costs, in order to make the work of the generating set more reliable. We also produces the base fuel tank that supplies the fuel for the generating set. The plastic base fuel tank and the metal fuel tank are optional.

**9. Emergency stop push button:**

The function of the emergency stop button is to prohibit the output of the control circuit. PLC control procedure produce the fault signals (including the failure to deal with signal relay action, sound and light alarm signals and so on). At the same time, it can cut off some of the main circuit according to the situation. The role of the stop button is to protect the personal safety of the crew and the generating set.



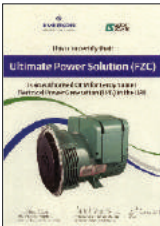
# Ultimate Power Solution

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## Solar and Wind Generators

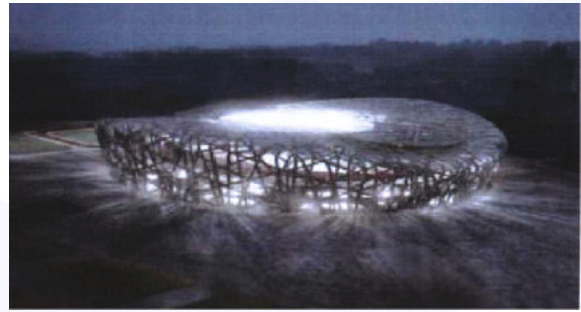


We, at UPS, provides the solar and wind generator + the solar power stations and all the solar and the clean power solutions

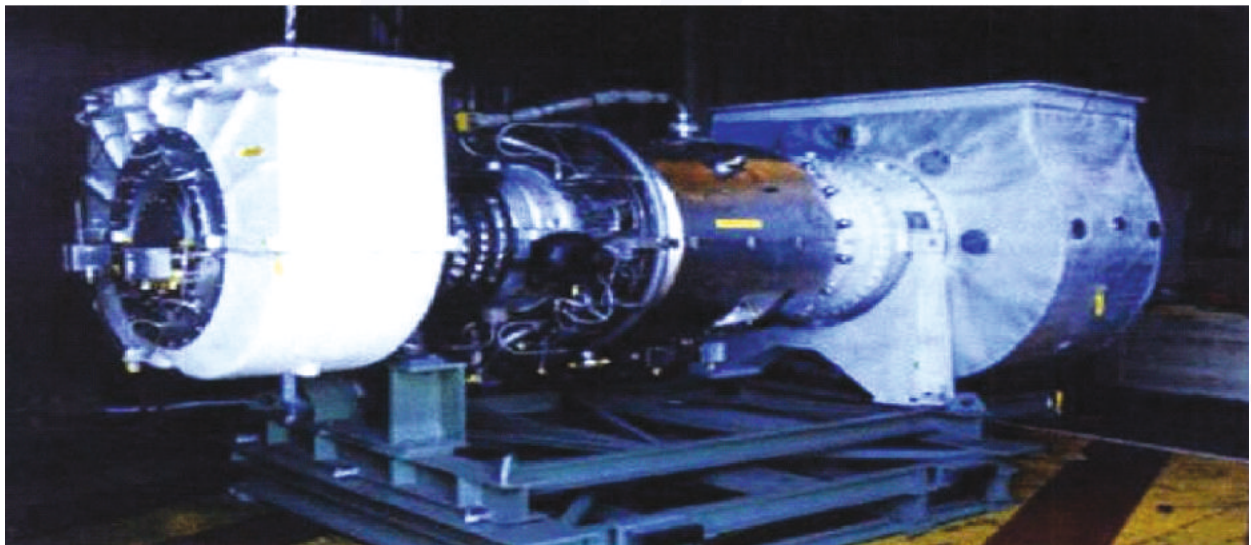




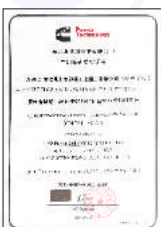
## Some Solar Power Projects



## 6.75 mw HPC turbine Genset ( Heat Power Cogeneration )



## Hydro Generators





# Ultimate Power Solution

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Solar and Wind Generators

Wind Turbine  
& Wind farm



Biomass Power Plants



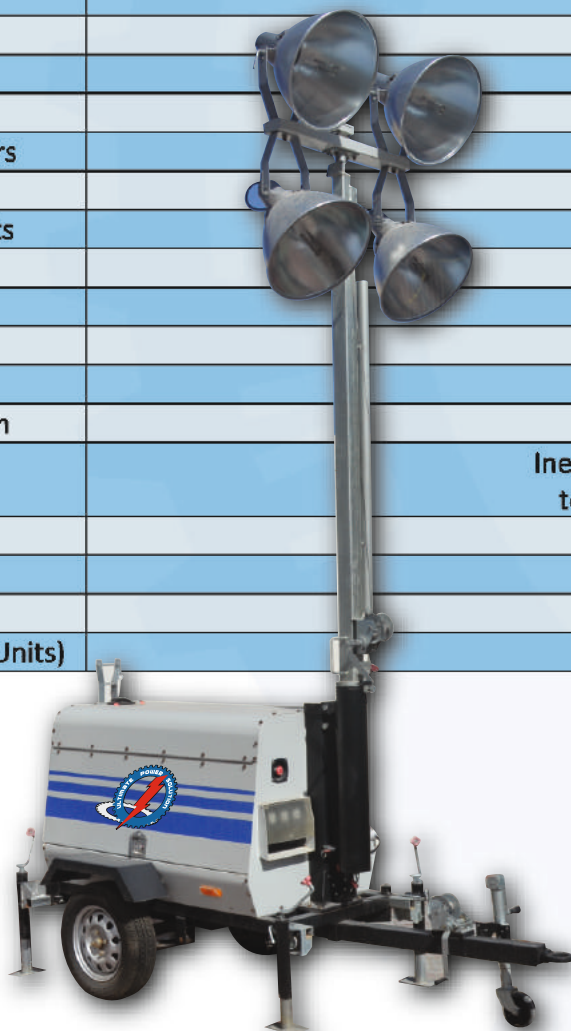
Heavy Fuel Power Stations





## LIGHTING TOWER TECHNICAL DATA

Product Model	MLT8-4000H							
Length (mm)	2784 (2260, dismantle the tow bar)							
Width (mm)	1360							
Height (mm)	2170							
Mast Height ( Fully Extended)	9m							
Weight (net)	1150 kg							
Engine Brand	Lister Petter				Perkins			
Engine Model	D1105				403D-11G			
Frequency (Hz)	50	60	50	60	50	60	50	60
Speed (rpm)	1500	1800	1500	1800	1500	1800	1500	1800
Continued Power ( KVA )	7	9	7	9	7	9	7	9
Number of Cylinders	3							
Diesel Engine Characters	Water cooled Diesel Engine							
Combustion Type	Precombustion	Indirect Injection	Indirect Injection	Indirect Injection	Indirect Injection	Direct Injection	Direct Injection	Direct Injection
Engine Aspiration	Natural							
Emission Level	Stage3	Tier4	Stage3	Tier4	Stage2	Tier4	NA	Tier4
Alternator Brand	Meccalte							
Alternator Model	LT-130							
Frequency ( Hz )	50	60	50	60	50	60	50	60
Continued Power ( KVA )	6	7.5	6	7.5	6	7.5	6	7.5
Alternator	Brushless & Single Phase							
Rating Voltage (V)	230							
Alternator Insulation	H							
Fuel Tank Capacity	135 Liters ( 35 US Gallons )							
Fuel Tank Operating Hours	65 Hours							
Type of Lights	Metal Halide Floodlights							
Number & Power of Lights	4x1000w							
Mast Lifting & Extension	Hydraulic Operation							
Mast Rotation	359° Manual Operation							
Light up-down turning	Manual Operation							
Base Support	Manual Operation							
Trailer Suspension System	Torsion Axle (AI-ko)							
Braking System	Inertia drum braking with stable towing height, parking brake							
Hitch	Draw eye / towing hook							
Tire & Rim size	185 / 14"							
Acoustic Pressure	65dB (A) at 7 meters away							
Load Capacity for 40'GP(Units)	8							



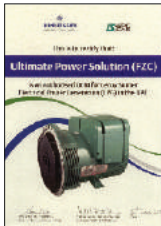
Ultimate Power Solution  
Company

Your Way For Power

Company



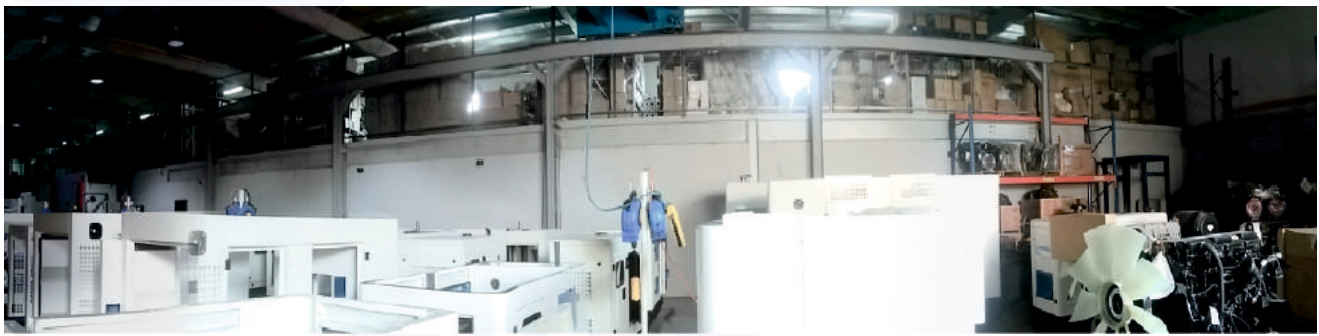






# Ultimate Power Solution *Your Way For Power*

## AFTER SALES SERVICES



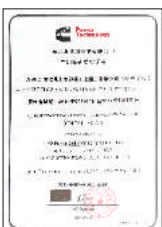
Ultimate Power Solution is dedicated to provide the best support to its customers with all the knowledge and experience.

Ultimate Power Solution has fully trained Field Services Engineers and Technicians having many years of hands on experience in looking after all aspects of the operation and maintenance of Diesel Generator Equipment to get your plant running and keep it running.

Ultimate Power Solution operates an international network of distributors to provide local support to the owners of Ultimate Power Solution. In order to get more information about the nearest distributor to your location, you can get in contact with Ultimate Power Solution after sales services.

### TRAINING:

Ultimate Power Solution distributors are supported by after Sales Services Department. Ultimate Power Solution provides numerous training courses at its factory facilities in SAIF Zone on regular bases and even conducts at your plant or office on request. Courses are available at different levels from beginners to advanced.







## Ultimate Power Solution

### PERFORMANCE

### HIGH PERFORMANCE

#### Engine:

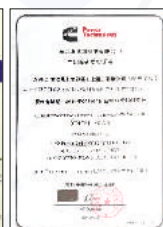
- In compliance with ISO 8528-2, ISO 3046, BS 5514, DIN 6271 Standards.
- Product of latest technology.
- Low Fuel Consumption.
- Mechanical or Electronical type of governor with sensitive speed adjustment.
- Globally approved quality and brands.

#### Alternator:

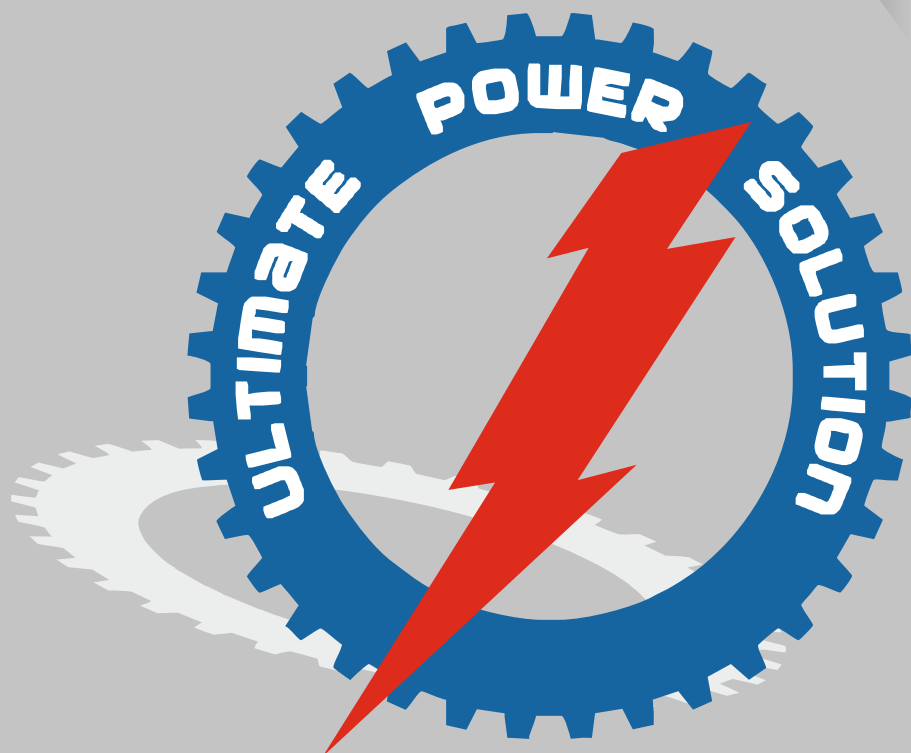
Globally approved quality and brands equipment for mobile use and designed with an extraordinary noiseless feature, according to the customer's request.

#### Rental Services:

**Ultimate Power Solution** provides full, quick and most suitable rental and after rental service, installation and supervision based on customer requirements by our worldwide service points with our wide range of gasoline and diesel generating sets from 5 KVA to 2500 KVA.



***YOUR WAY  
FOR POWER***



## **Ultimate Power Solution (FZC)**

### **HEAD OFFICE ADDRESS:**

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ROAD TOWN TORTOLA BRITISH ISLAND - UK**

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FREEZONE, UNITED ARAB EMIRATES  
TEL: +971 6 557 0722  
FAX : +971 6 557 0733  
WEBSITE : [www.upsgenerator.com](http://www.upsgenerator.com)**



**Other Branches :**  
**Mascow, Shanghai**

