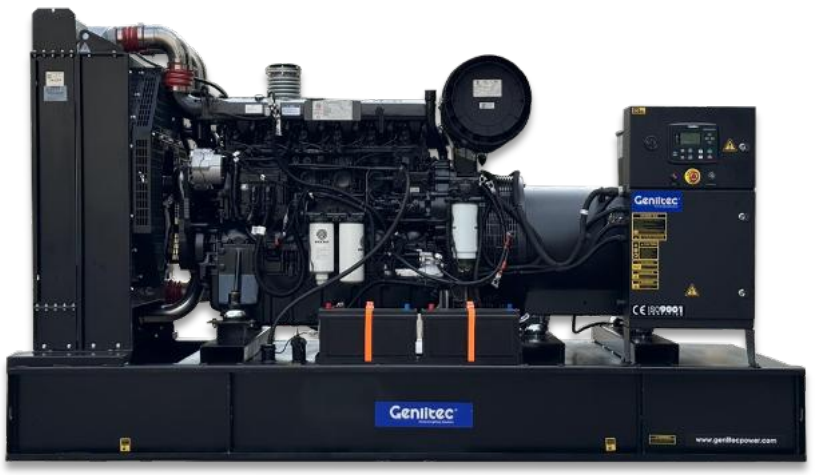
GPW450S5 | GPW450D5

Powered by WEICHAI

Genlitec® Power & Lighting Solutions





■ Generator Specification

Service	PRP(1)	ESP(2)
Power (KVA)	450	500
Power (KW)	360	400
Rated speed	1500RPM	
Standard voltage	400/230V	
Power factor	0.8	
Phase	3	

Performance Data		
Model		**GPW450S5 | GPW450D5**
Engine brand		**WEICHAI**
Engine model		WP13D440E310
Speed control type		ECU
Alternator brand		**GENLITEC**
Alternator model		S314G360
Control system		**SMARTGEN** HGM6120N
Starter motor voltage		24V
Frequency		50Hz
Fuel Consumption (L/H)	100% Prime Load	85.5
	75% Prime Load	63.5
	50% Prime Load	43.2
	25% Prime Load	/
	Fuel Tank (L)	780

ISO CE

GENLITEC Power gensets are compliant with ISO 9001 and CE standard, which include the following directives:

- 2006/42/EC Machinery directive
- 2014/30/EU Electromagnetic compatibility directive
- EN 12100:2010; EN ISO 8528-13:2016; EN 60204-1:2018; EN 61000-6-2:2019; EN 61000-6-4:2019
- **GPW450S5 (Silent Type)**
- **GPW450D5 (Open Type)**

(1) PRP (Prime Power)

According to ISO 8528-1, prime power is the maximum power available during a variable power sequence, which may be run for an unlimited number of hours per year, between stated maintenance intervals. The permissible average power output during at 24 hours period shall not exceed 80% of the prime power. 10% overload available for governing purposes only.

(2) ESP (Standby Power)

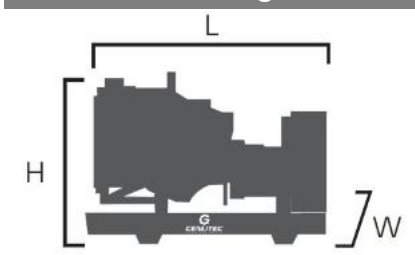
According to ISO 8528-1. It is defined as the maximum power available, under the agreed operating conditions, for which the generating set can deliver for up to 500 hours of operation per year (of which no more than 300 hours for continuative use) with the maintenance intervals and procedures being carried out as prescribed by the manufactures. No overload capability is available.

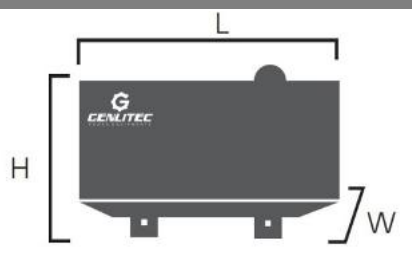
Voltage (V)	ESP		PRP		Current
	KVA	KW	KVA	KW	Amps
415/240	500	400	450	360	626
400/230	500	400	450	360	649.5
380/220	500	400	450	360	683.7

Standard Reference Conditions

Note: Standard reference condition 25℃ (77°F) air inlet temp. 100m (328ft) A.S.L 30% relative humidity. Fuel consumption date with diesel fuel with specific gravity of 0.85 and conforming to BS 2869: 1998 Class A2

Dimension & Weight





Dimension	Open type	Silent type
Length (L)	3150mm	4250mm
Width (W)	1300mm	1500mm
Height (H)	1880mm	2230mm
Net Weight	2800kg	3800kg

Note: This parameter allows for some acceptable deviations.

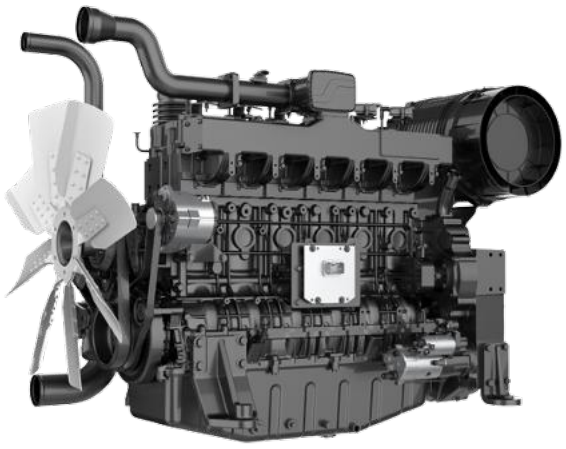
GENLITEC POWER has the right to modify any feature without prior notice, Weights and dimensions based on standard products. Illustrations may include optional equipment. Technical data described in this document correspond to the available information at the moment of printing. The illustrations and images are indicative and may not coincide in their entirety with the product.

GPW450S5 | GPW450D5

Powered by WEICHAI

Genlitec® Power & Lighting Solutions

■ Engine Specification



MODEL: WEICHAI WP13D440E310	
Cylinder number	6
Aspiration system	Turbocharged & aftercooled
Cooling method	Water cooled
Governor type	ECU
Bore x Stroke (mm)	127 x 165
Compression ratio	16.0:1
Rated speed (RPM)	1500
Displacement (L)	12.54
Rated power (KW)	392
Standby power (KW)	440
Injection	50°C
Coolant capacity (L)	25(engine only)
Oil capacity (L)	30
Fuel system	Common-rail
Starter motor capacity	DC 24V

■ Alternator Specification



MODEL: GENLITEC S314G360	
Number of phase	3
Rated power (KW/KVA)	360/450
Frequency (Hz)	50
Power factor (Cos Phi)	0.8
Poles	4
Temp. rise	125K
Terminals	6 (12-lead for option)
Insulation type	H class
Ambient temp.	40℃
IP rating	IP23
Excitation system	Self-excited
Bearing	Single bearing
Coating	Vacuum impregnation
Voltage regulator	A.V.R
Coupling	Flexible disc

Standard Supply Scope

- ■ Industrial exhaust silencer
- ■ Maintenance free battery
- ■ Water cooling radiator
- ■ A.V.R
- ■ Flexible pipes
- ■ Battery wires
- ■ Wiring diagram
- ■ Build-in based fuel tank
- ■ Float Battery charger
- ■ Manual books
- ■ Tool kits
- ■ Emergency stop button
- ■ Base frame
- ■ Digital control panel
- ■ Main circuit breaker

■ Optional Supply Scope

Engine	Alternator	Generator Sets	Control Panel
○ Water jacket pre-heater	○ Anti-condensation heater	○ Galvanized enclosure	○ Remote control system
○ Lubrication oil pre-heater	○ AREP / PMG		○ ATS panel
○ Battery isolator	○ **STAMFORD** alternator		○ Synchronizing System
	○ **LEROY SOMER** alternator		

■ Warranty Period

WEICHAI diesel engine: 12 months or 1000 working hours.
STAMFORD/LEROY SOMER alternator: Global warranty, 12 months or 1000 working hours.
GENLITEC alternator: Factory warranty, 12 months or 1000 working hours.
DEEPSEA control module: Factory warranty, 12 months or 1000 working hours.

GPW450S5 | GPW450D5

Powered by WEICHAI

Genlitec® Power & Lighting Solutions

■ Control Panel

Configuration
■ Emergency stop button
■ Protection MCB (Main circuit breaker)
■ Float battery charger
■ ATS connection
■ AMF digital control module
■ Fuel level meter
■ Controller power switch
■ Alarm buzzer



Features
■ Chinese, English, Spanish, Turkish, Russian & French
■ Three phase generator monitoring
■ Automatic or manual start/stop of the gensets
■ Push buttons for simple control & operation
■ Generator measurements (50Hz/60Hz)
■ Precision collect & display parameters about ENGINE
■ Comprehensive shutdown or warning on fault condition
■ Three phase generator protections
- Over / under voltage
- Over / under frequency
- Current / voltage asymmetry
- Over current / overload
■ Three phase AMF function
- Over / under voltage
- Loss of phase detection function
■ Emergency start function
■ IP55 waterproof with rubber-ring gasket

Control Module Model: SMARTGEN HGM6120N	
Display	LCD (132 x 64)
Operation panel	Silicon rubber
Digital input	5
Relay output	6
Analogue input	3
AMF	Yes
AC System	1P2W / 2P3W / 3P3W / 3P4W
Alternator voltage	15-360V (ph-N)
Alternator frequency	50/60Hz
KW/Amp Detecting & Display	Yes
Monitor interface	USB
Programmable interface	USB
DC supply	DC 8-35V
Operating temp.	-25 ~ +70℃

■ Controller Module Options

COMAP	DEIF	DEEPSEA
AMF25	SGC 420	DSE7320
		

Genlitec® Power & Lighting Solutions

GENLITEC POWER TECHNOLOGY CO., LTD.
GENLITEC (FUZHOU) POWER EQUIPMET CO., LTD.
marketing@genlitec.com | www.genlitecpower.com

Local Distributor / Partner

All information in the document is substantially correct at the time of printing
But may be subsequently altered by the company.