



### Emergency Standby Power (ESP):

Applicable for supplying power to varying electrical load for the duration of power interruption of a reliable utility source. Emergency Standby Power (ESP) is in accordance with ISO 8528. Fuel Stop power in accordance with ISO 3046, AS 2789, DIN 6271 and BS 5514.

### Prime Power (PRP):

Applicable for supplying power to varying electrical load for unlimited hours. Prime Power (PRP) is in accordance with ISO 8528. Ten percent overload capability is available in accordance with ISO 3046, AS 2789, DIN 6271 and BS 5514.

### Continuous Power (COP):

Applicable for supplying power continuously to a constant electrical load for unlimited hours. Continuous Power (COP) in accordance with ISO 8528, ISO 3046, AS 2789, DIN 6271 and BS 5514.

### Keypower generators are CE certified and conform to the following Directives:

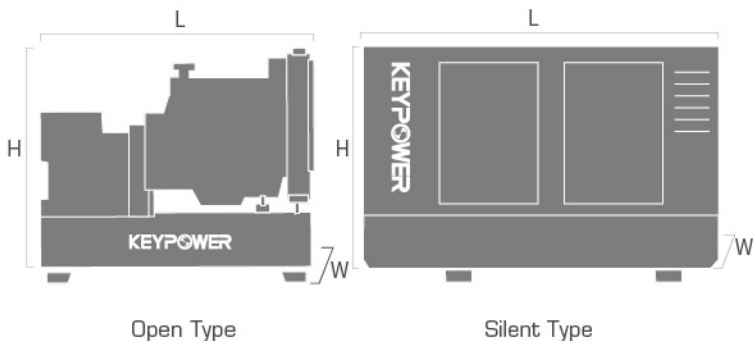
- EN 12100: 2010, EN ISO 8528-13: 2016, EN 60204-1: 2018, EN 61000-6-2: 2019, 2006/42/CE Machinery safety
- 2014/35/EU Low voltage
- 2014/30/EU Electromagnetic compatibility
- Power according to ISO 8528 and ISO 3046
- Ambient reference conditions 1000 mbar, 25°C, 30% relative humidity.

Information based on standard specification equipment unless otherwise stated.

GENERATOR MODEL		KP-M650S		
	Generator specifications	PRP	ESP	
	Power	kW/kVA	NA	520/650
	Rated speed	r.p.m.	1500	
	Available voltages	V	380~415	
	Frequency	Hz	50	
	Phase		3-PH	
	Power factor	Cosφ	0.8	
	Fuel cons 100%	L/H	TBD	
	Starting power	kW	TBD	
	Recommended battery	Ah	TBD	
	Number of batteries		TBD	
	Auxiliary voltage	VDC	TBD	



## Dimension and Weight



DIMENSION	OPEN TYPE	SILENT TYPE	
Length (L)	mm	3390	4650
Width (W)	mm	1635	2020
Height (H)	mm	2145	2502
Dry weight	kg	TBD	TBD
Fuel tank	L	TBD	TBD

KEYPOWER 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 catalogue 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. Industrial design under patent.



## Engine Specifications

ENGINE	MTU®
Engine model	12V 1600 G70F
Number of cylinders	12
Cylinder arrangement	Vertical in-line
Cycle	Four stroke
Aspiration	Turbocharged
Bore × Stroke	TBD
Displacement	21 L
Compression ratio	TBD
Prime power/Speed	NA/1500 (kW/rpm)
Standby power/Speed	576/1500 (kW/rpm)
Speed governor	ECU
Cooling system (open type)	40°C tropical radiator
Cooling system (silent type)	50°C tropical radiator

ENGINE	MTU®
Total lubrication system capacity	TBD
Coolant capacity (with radiator)	TBD
Speed stability (%)	≤5%
Start type	Electrical
Maximum exhaust temperature	TBD
Exhaust gas flow	TBD
Maximum allowed back pressure	85 mbar
Intake air flow	TBD
Cooling air flow	TBD
Consumption @ 100% load ESP	TBD
Consumption @ 100% load PRP	TBD
Consumption @ 75% load PRP	TBD
Consumption @ 50% load PRP	TBD



### Features:

- Diesel engine
- 4-stroke cycle
- Water-cooled
- Dry air filter
- Radiator with pusher fan
- Moving parts protection
- Radiator water level sensor (Optional)
- 55 degree radiator (Optional)
- Jacket coolant heater (Optional)
- Lube oil heater (Optional)
- Engine filter heater (Optional)
- Fuel inlet line heater (Optional)
- Heavy duty air filter (Optional)



## Alternator Specifications

ALTERNATOR	
Exciter type	Brushless, self-excited
Power factor	0.8
Voltage adjust range	≥5%

ALTERNATOR	
Voltage regulation NL-FL	≤±1.0%
Insulation grade	H
Protection grade	IP23



### Options:

- AREP/PMG/EBS
- Air inlet filter (5% deration)
- Louver (5% deration)
- Space heater
- Digital AVR
- Severe environmental impregnation
- Stator sensor
- PT100
- Rotor sensor
- Double bearing
- Drip proof cover
- Terminal box IP44
- Double bearing



## Controller Brands

KEYPOWER

Deep Sea

ComAp

SmartGen

DEIF

Woodward

## Controller Functions

OPTIONAL CONFIGURATION	Stand-alone Basic	Stand-alone Advanced	Synchronization Basic	Synchronization Advanced
Voltage between phases	●	●	●	●
Voltage between neutral and phase	●	●	●	●
Current intensities	●	●	●	●
Frequency	●	●	●	●
Apparent power (kVA)	●	●	●	●
Active power (kW)	●	●	●	●
Reactive power (kVAr)	●	●	●	●
Power factor	●	●	●	●
Coolant temperature	●	●	●	●
Oil pressure	●	●	●	●
Battery voltage	●	●	●	●
R.P.M.	●	●	●	●
Battery charge alternator voltage	●	●	●	●
High water temperature by sensor	●	●	●	●
Low oil pressure by sensor	●	●	●	●
Unexpected shutdown	●	●	●	●
Fuel storage by sensor	●	●	●	●
Stop failure/Start failure	●	●	●	●
Overspeed/Underspeed	●	●	●	●

● Standard ○ Optional



OPTIONAL CONFIGURATION	Stand-alone Basic	Stand-alone Advanced	Synchronization Basic	Synchronization Advanced
Emergency stop	●	●	●	●
High/Low frequency	●	●	●	●
High/Low voltage	●	●	●	●
Short-circuit	●	●	●	●
Incorrect phase sequence	●	●	●	●
Inverse power	●	●	●	●
Overload	●	●	●	●
Total hour counter	●	●	●	●
Kilowatt meter	●	●	●	●
Starts valid counters	●	●	●	●
Maintenance	●	●	●	●
USB	●	●	●	●
Software for PC	●	●	●	●
Alarm history	●	●	●	●
External start	●	●	●	●
Start inhibition	●	●	●	●
Mains failure start	●	●	●	●
Pre-heating engine control	●	●	●	●
Fuel transfer control	●	●	●	●
Engine temperature control	●	●	●	●
Programmable alarms	●	●	●	●
Genset start function in test mode	●	●	●	●
Programmable outputs	●	●	●	●
Multilingual	●	●	●	●
RS485		●	●	●
Modbus IP		●	●	●
J1939		●	●	●
Synchronization			●	●
Mains synchronization				●
Fuel level (%)	○	○	○	○
Low water level	○	○	○	○
GSM/GPRS modem	○	○	○	○
Remote screen	○	○	○	○

● Standard ○ Optional

+86 591 83405668  
+86 591 38207503

lily@keypower.com  
sales@keypower.com

Fuzhou Gff Keypower Equipment Company Limited  
Keypower Solutions (Fujian) Company Limited

Add: No. 3-1, Dongling RD, Ganzhe Street, Minhou County, Fuzhou, Fujian, China