



## Genset

Model	JHY5-1600GF
Voltage	230/400V
Frequency&Speed	50HZ 1500RPM
Prime Power	1625kW/2031kVA
Standby Power	1787kW/2233kVA

## General Engine Data

### Main technical parameters

Number of cylinders	16
Configuration	V, 90°
Aspiration	Turbocharged, water-air intercooled
Combustion system	Direct injection
Compression ratio	14:1
Bore	152 mm
Stroke	180 mm
Displacement	52.26 L
Rotation	Counterclockwise (viewed from the flywheel end)
Firing order:	A1-B6-B1-A6-A4-B7-A3-B8-B2-A8-A2-B5-B3-A5-B1-A7 Viewed from the back end: numbered starting from 1, with A for left side, and B for right side.
Dry weight (excluding radiator)	5600 kg
Wet weight (excluding radiator)	6050 kg

### Overall dimensions

Length (from the fan to the flywheel housing)	2,800 mm
Width	1,700 mm
Height	1,950mm

Gravity center coordinate (dry engine, with the center of the end face of the flywheel shell as the origin)

### Fuel consumption

Note: The diesel density is 0.835 kg/L.

Conditions	1500 r/min	
	g/ (kW·h)	L/h
Standby power	205.9	490.4
Prime power	199.9	432.5
75% of prime power	195.5	316.2
50% of prime power	199.5	216.2

- Engine: Yuchai YC16VTD2700-D30
- Alternator: Stamford/Leroy Somer /Hengsheng
- Controller: DeepSea/SmartGen /DEIF/ComAp

From the rear end face of the flywheel	1043mm
Height relative to the center of the crankshaft	172 mm
Centerline deviation relative to the crankshaft center gravity	-11mm

### Shafting rotation inertia

Engine	18.63 kg·m <sup>2</sup>
Flywheel	11.34 kg·m <sup>2</sup>

### Performance rating

Speed drop	0.3%
Speed fluctuation rate	0.5%
Speed governing type	Electronic control

### Test conditions

Ambient temperature	25°C
Atmospheric pressure	100 kPa
Relative humidity	30%
Max. operating intake resistance	≤5 kPa
Exhaust backpressure limit	≤10 kPa
Fuel temperature (fuel inlet pump)	38±2°C

Note: Unless otherwise specified, the data of this list of parameters are measured under these test conditions. If the engine is used under other test conditions other than those described above, proper adjustment shall be made according to the actual environment. For specific details, please contact Yuchai technical service department.

### Lubricating system

Total oil capacity (dry engine)	310 L
Total oil capacity (oil change)	280 L
Oil sump capacity - low level/high level	176/280 L
Max. oil temperature (oil sump)	120°C
Operating oil temperature (oil sump)	(90~115)°C
Oil pressure at idle speed	≥120 kPa
Oil pressure at rated speed	(250~500) kPa
Engine oil-fuel consumption ratio	≤0.3 %

## Cooling system

Total coolant capacity .....	554 L
Engine coolant capacity.High temperature: 140 L, low temperature: 30 L	
Radiator coolant capacityHigh temperature: 182 L, low temperature: 162 L	
Pipeline coolant capacity .....	40 L
Max. water outlet temperature of engine (high temperature water passage) .....	≤97℃
Max. inlet temperature of engine (low temperature water passage) .....	≤65℃
Pressure difference between inlet and outlet of water pump (max. hydrostatic head) .....	150 kPa
Thermostat operation temperature .....	
Initial opening temperature (75±2)℃, full opening temperature (85±2)℃	
Max. water temperature rise:	
- Standby power .....	13℃
- Prime power .....	12℃

## High temperature radiator

Cooling area .....	665 m <sup>2</sup>
Dry weight .....	920 kg
Material .....	Aluminum
Number of lines .....	/line
Density of core .....	cooling fins/inch
Width of core .....	2220 mm
Height of core .....	2200 mm
Min. pressure of pressure cover .....	(90±5) kPa

Material .....	Nylon
Number of blades .....	12
Blowing/suction .....	Blowing type

## Intake system

### Air cleaner

Max. intake resistance:	
- Clean air cleaner .....	3.5 kPa
- Dirty air cleaner .....	5 kPa
- Air cleaner type .....	Dry paper element

## Inclination

Transverse inclination/longitudinal indination (oil sump capacity: 280 L) .....	5°/5°
---	-------

## Fuel system

Injection system .....	High pressure common rail
------------------------	---------------------------

### Fuel injector

Type .....	Electronically-controlled injector, multi-hole injection
Fuel injector opening pressure .....	Electronically-controlled

### Fuel pump

Drive mode .....	Gear drive
Fuel delivery pump flow @ 1,500 rpm .....	8.5 L/min
Max. fuel inlet temperature limit .....	70℃
Allowed fuel inlet pressure (absolute pressure) at the front end of fuel delivery pump .....	(50~100) kPa
Max. fuel return pressure of fuel pump .....	30 kPa

## Alternator

Pole No.	4-Pole
Exciter Type	Single bearing, Brushless, Self-excited
Power factor	0.8
Voltage adjust range	≤ 5%
Insulation Grade	H
Protection Grade	IP23/22
Phase / wire	3 phase 4 wires

- ✧ NEMAMG1.JIANGHAO,and ANSI standards compliance for temperature rise and motor starting.
- ✧ Sustained short-circuit current of up to 300% of the rated current for up to 10 seconds.
- ✧ Sustained short-circuit current enabling down stream circuit breakers to trip without collapsing the generator field.
- ✧ Self-ventilated and dripproof construction.
- ✧ Superior voltage waveform from two-thirds Pitch windings and skewed stator.
- ✧ Digital solid-state.volts-per-hertz voltage Regulator with +1% no-load to full-load regulation.



## Control Panel



The control module gives digital readouts of:

Generator voltage;  
Output frequency;  
Engine speed;  
Battery voltage;  
Engine hours run.



Dimension:5500\*2300\*2530mm

Weight:13000kg



Dimension:12000\*2400\*2900mm

Weight:16800kg

Fuel Tank Capacity:1000-3000L

The **control panel** is an Digital Control Module suitable for a wide variety of single, diesel or gas, gen-set applications.

Monitoring an extensive number of engine parameters, the module will display warnings, shutdown and engine status information on the back-lit LCD screen and illuminated LEDs.

**The control module has indicators for failure information:**

Over speed/Low speed,  
Emergency stop  
Low oil pressure;  
High water temperature  
Failure to start  
Battery charger failure

**Automatic shutdown occurs under:**

Low engine oil pressure;  
High engine water temperature;  
Over speed/Low speed;  
Failure to start after three attempts.

## Electrical system

- Maintenance-free and anti-explosion battery
- Standard breaker
- ABB breaker (optional)
- ATS (optional)
- Battery charger (optional)
- GMS monitoring (optional)

## Packing

- Wrapping film packaging
- Tray packaging
- plywood box packaging

**Jiangsu Jianghao Generator Co.,Ltd**

Address: No.1 Xixu Road, Medical High-tech Zone,  
Taizhou city, Jiangsu, China

Contact Person: Anthony Feng

Email: [jhfsale@jhgenerator.com](mailto:jhfsale@jhgenerator.com)

WhatsApp: +86 18652649673

