



## Diesel Generator Set Data

|                  |                                                 |
|------------------|-------------------------------------------------|
| Manufacturer:    | Jiangsu Starlight Generating Equipments Co.,Ltd |
| Set Type:        | XG-120GF                                        |
| Standby Power:   | 120KW /150KVA                                   |
| Prime Power:     | 109KW /136KVA                                   |
| Rated Current:   | 216 (A)                                         |
| Rated Frequency: | 50 (Hz)                                         |
| Start-up time:   | 5~6 (s)                                         |
| Power Factor:    | 0.8 (Lag)                                       |
| Rated Voltage:   | 400/230 (V)                                     |

## Standard Features

- ✓ Engine: HUAFENG R6105AZLD-1
- ✓ Radiator 40℃ max
- ✓ Fans are driven by belt, with safety guard
- ✓ 24V charge alternator
- ✓ Dry type air filter, fuel filter, oil filter
- ✓ Alternator: single bearing alternator
- ✓ IP22, insulation class H/H
- ✓ Main line circuit breaker
- ✓ Standard control panel
- ✓ Absorber
- ✓ Muffler
- ✓ User manual





## Diesel Engine Data

|                        |                        |
|------------------------|------------------------|
| Manufacturer:          | WEIFANG HUAFENG Engine |
| Model:                 | R6105AZLD-1            |
| Prime /Standby Power:  | 110KW/121KW            |
| Rated Speed:           | 1500 (r/min)           |
| Cycle:                 | 4 stroke               |
| Cylinder Arrangement:  | 6 in line              |
| Displacement:          | 6.75L                  |
| Bore and Stroke:       | 105*130 (mm)           |
| Compression Ratio:     | 16:1                   |
| Governor Type:         | Mechanical             |
| Start battery voltage: | 24V DC                 |

### Air Intake System

|                         |           |
|-------------------------|-----------|
| Air Intake System:      | Turbo     |
| Max Intake Restriction: | 6.2kPa    |
| Burning Capacity:       | 8.5m3/min |
| Air Flow:               | 210m3/min |

### Exhaust System

|                      |            |
|----------------------|------------|
| Exhaust Gas Flow:    | 19.8m3/min |
| Exhaust Temperature: | ≤600℃      |
| Max Back Pressure:   | 4kpa       |

### Fuel System

|                          |                  |
|--------------------------|------------------|
| Fuel System:             | Direct Injection |
| 100%( Prime Power) Load: | 218g/kwh         |

### Oil System

|                            |              |
|----------------------------|--------------|
| Total Oil Capacity:        | 17L          |
| Oil Consumption:           | ≤2.04g/kwh   |
| Oil Pressure at Rated RPM: | 0.30-0.50MPa |

### Cooling System

|                         |              |
|-------------------------|--------------|
| Cooling Way:            | Water-cooled |
| Total Coolant Capacity: | 32L          |
| Max Water Temperature:  | 98℃          |

**Alternator Data**

|                                     |                                                                     |
|-------------------------------------|---------------------------------------------------------------------|
| Manufacturer:                       | STARLIGHT/<br>STAMFORD/<br>SIEMENS/<br>MARATHON/<br>ENGGA /<br>KEPU |
| Excitation Mode:                    | Brushless self-excitation                                           |
| Number of phase and Access Act:     | 3-phase 4-wire                                                      |
| Connecting Type:                    | “Y” type connecting                                                 |
| Alternator Capacity:                | 150KVA                                                              |
| Alternator Efficiencies:            | 95%                                                                 |
| Overload:                           | (PRP) 110% load can run 1h                                          |
| Protection Level:                   | IP22-IP23                                                           |
| Insulation Class, Temperature Rise: | H/H                                                                 |
| Telephone Influence Factor (TIF):   | <50                                                                 |
| THF:                                | <2%                                                                 |
| Altitude:                           | ≤1000m                                                              |

**Genset Electrical Performance**

|                                               |       |
|-----------------------------------------------|-------|
| Voltage Regulation:                           | ≥±5%  |
| Voltage Regulation, Stead State:              | ≤±1%  |
| Sudden Voltage Warp (100% Sudden Reduce):     | ≤+25% |
| Sudden Voltage Warp (Sudden Increase):        | ≤-20% |
| Voltage Stable Time (100% Sudden Reduce):     | ≤6S   |
| Voltage Stable Time (Sudden Increase):        | ≤6S   |
| Frequency Regulation, Stead State:            | ≤5%   |
| Frequency Waving:                             | ≤1.5% |
| Sudden Frequency Warp (100% Sudden Reduce):   | ≤+12% |
| Sudden Frequency Warp (Sudden Increase):      | ≤-10% |
| Frequency Recovery Time (100% Sudden Reduce): | ≤5S   |
| Frequency Recovery Time (Sudden Increase):    | ≤5S   |



## Options

### Engine

Heater 2KW & 4KW  
 Battery Charger 3.5A & 7A  
 Water Separator  
 Daily Fuel Tank  
 Fuel Level Sensor

### Alternator

Anti Condensation Heater  
 Permanent Magnet Generator (PMG)  
 Drop CT (For Paralleling)

### Control System

Remote Control Panel  
 Auto Transfer Switch (ATS)  
 Paralleling System

### Others

Rainproof Type  
 Soundproof Type  
 Trailer Type

## Open Type

### Overall Size

2500(mm)\*900(mm)\*1600(mm)

### Weight

1600 (kg)

## Soundproof Type

### Overall Size

3400(mm)\*1200(mm)\*1800(mm)

### Weight

2500 (kg)



## Standard Control Panel



Starlight Standard Control Panel uses micro processing technique integrating digital, intelligent and network techniques which can carry out functions including auto start/stop, data measure, alarming. The controller uses LCD display, optional Chinese and English display interface with operation easy and reliable. It can be widely used in all types of generator automatic control system for compact structure, advanced circuits, simple connections and high reliability

## Auto Module Control Panel



Auto Module Control Panel is the configuration for nobody on duty controlling generators. This kind of panel adopts auto module control system, with large LCD display to show the menu. Features: 6110 can receive remote output signal from ATS and realize auto start and stop of generators. 6310 can realize all functions of 6110, add RS232 interface which can communicate with PC to realize remote operation. 6410 Auto Mains Failure controller, can realize all functions of 6310, furthermore can detect ATS and control directly.

## Auto Parallel Control Panel



This new automatic parallel system adopts intelligent modules, inserted and folded installed, no need the peripheral relay and logic circuit. The main switch adopts electronic breaker or frame breaker, combined together with the generator, which is very reliable. One generator, one panel. The panel can be used both for singly and parallel. It is only need to parallel generator with such panel when the capability needs to be enlarged in the future.