

# TECHNICAL DATA

DIESEL GENERATING SET

MPMC POWERTECH CORP.

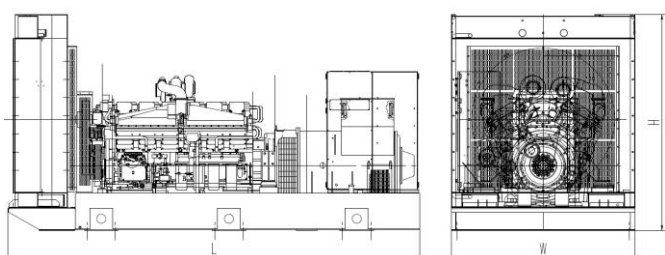
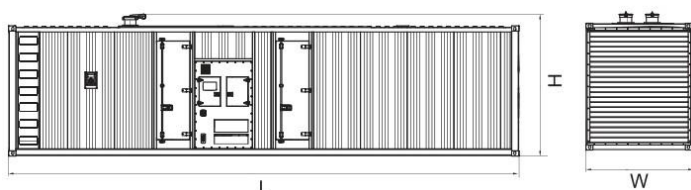
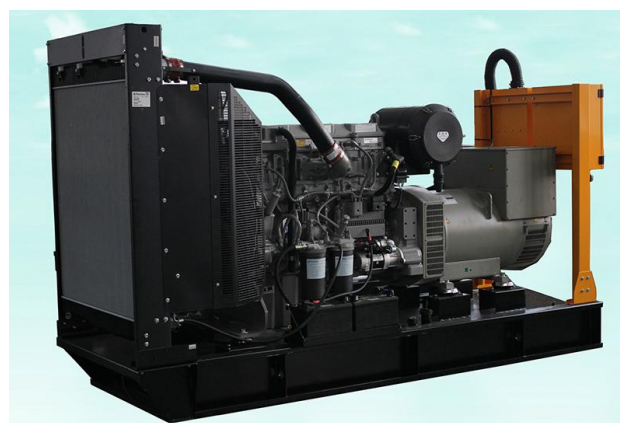
50HZ

## MPS650S-1/ MPS650-1

### Features

- Compact structure high-strength chassis
- Easy operation and maintenance, Low cost
- Good performance damping system
- Compliance with international electrical safety standards of electrical system
- High-performance maintenance-free batteries with isolation switch
- 50°C Radiator
- Top lifting, Forklift bottom hole design, easy to transport
- Industrial type muffler
- Noise reduction structure , Low overall noise
- Convenient power output interface and ATS Interface
- IP56 (control system)
- Customized design for user
- Structure optional: Open (MPS650-1)  
Sound-proof ( MPS650S-1)

Reference images, the actual shall prevail



### Genset Technical Data

Output frequency	50 HZ
Rated speed	1500 rpm
Prime power	650 KVA
Standby power	715 KVA
Rated voltage	400 V
Phase	3
Noise dB(A) @7m	70
Engine model	2806A-E18TAG2
Alternator model	HCI 544F
Fuel consumption of 100% load	132 Litres/h
Fuel consumption of 75% load	97 Litres/h
Voltage regulation rate	≤±1%
Random voltage variation	≤±1%
Frequency regulation rate	≤±5%
Random frequency variation	≤±0.5%

### Dimension and Weight

Generating set model	MPS650S-1	MPS650-1
Length(L) (mm)	4800	3744
Width(W) (mm)	1822	1536
Height(H) (mm)	2550	2180
Dry weight (k g)	6029	4561
Tank capacity ( L )	940	1046

Engine Specifications			
Engine model	2806A-E18TAG2		
Engine manufacturer	PERKINS		
Number of cylinders	6		
Cylinder arrangement	Vertical in-line		
Cycle	Four stroke		
Aspiration	Turbocharged, air-air charge cooled		
Bore Stroke (mm mm)	145 x 183		
Displacement (Liter)	18.1		
Compression Ratio	14.5:1		
Prime power/speed	565KW / 1500rpm		
Standby power/speed	609KW / 1500rpm		
Speed governor	Electrical		
Cooling system	Forced Water Cooling Cycle		
Steady speed droop (%)	≤1%		
Total lubrication system capacity (L)	62.0		
Coolant capacity (L)	61.0		
Fuel consumption at 100% load(g/kWh)	202(at 1500RPM)		
Starter motor	DC 24V		
Alternator	DC 24V		
Alternator Specifications			
Alternator model	HCI 544F		
Rated output prime power	670 kVA		
Efficiency (%)	95.0%		
Rated speed	1500 RPM		
Rated frequency	50 Hz		
Phase	3		
Rated voltage	400 V		
Exciter type	Self excitation, Brushless		
Power factor	0.8		
Voltage adjust range	≥5%		
Voltage regulation NL-FL	≤±1%		
Insulation grade	H		
Protection grade	IP23		
Xd DIR. AXIS SYNCHRONOUS	2.62		
X'd DIR. AXIS TRANSIENT	0.14		
X''d DIR. AXIS SUBTRANSIENT	0.10		
Xq QUAD. AXIS REACTANCE	2.19		
X''q QUAD. AXIS SUBTRANSIENT	0.23		
<b>Optional</b>			
Optional Alternator brand	Leroy Somer	MECC	MPMC
Optional Alternator model	LSA 49.1 S4	ECO40-2L/4	LYG 354E
Rated output prime power	660KVA	680KVA	670KVA

## Control System

### NSM-1250-7320

NSM-100-7320 is an advanced control module based on micro-processor, It is an Auto Mains (Utility) Failure Control Module(AMF), have been designed to start and stop generating sets that include electronic And non-electronic engines. Include the additional capability of being able to monitor a mains (utility) supply. when main is not available, It can automatically start the engine and close generating sets breaker automatically, Accurately measure various operational parameters and display all values and alarms information on the LCD. In additional, it can automatically open breaker, and shutdown the engine after the main supply recovers.

### Main Features

- AMF and ATS and communication and expansion function
- Designed to work with electronic or non-electronic or gas engine simultaneously. (support many kinds of engines ECU).
- Manual, Automatic, Test and remote control mode selectable.
- Monitoring and measuring operational parameters of the mains supply and genset.
- Indicating operation status, fault conditions, all parameters and alarms
- Multiple protections and multiple parameters display.
- Includes 12 inputs and eight outputs. 8 inputs are configurable and 4 outputs are configurable.
- Can be programmed using the front panel or by using the PC software.
- Support twelve languages. The language was edited by customer.
- Graded protection: pre-alarm, shutdown and electrical trip, flexible setting.
- The module can be pre-set for four operating modes and protecting parameters.
- Add DSE860 or DSE865 module, internet network monitoring can be realized.
- The firmware can be updated automatically, so customer can have the latest version.



### The control module display

- Generator voltage
- Generator frequency
- Battery voltage
- Engine speed
- Load current
- Generator KVA, KW, PF
- Engine run-time Hours
- Engine oil pressure
- Engine coolant temperature
- Real time clock for time and date, overall runtime

## Optional

### Engine

- Water Jacket Preheater
- Fuel-water separator
- Oil pump
- Oil preheater
- Battery preheater

### Alternator

- PMG excitation
- Space heater
- Winding Temperature Measuring

### Generator Set

- Tools with the machine
- Coolant (-30°C)

### Control System

- AMF function
- ATS control cabinet
- Double-frequency and double voltage
- Single phase
- ABB MCCB

### Fuel System

- 12 / 24 hour base tank (single wall)
- Dual wall base fuel tank
- Outside fuel tank
- Automatic fuel feeding
- Fuel level indicate

### Canopy

- Hired type
- Economy Oil heater
- Trailer

## Contact Us

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ISO9001:2008  
MPMC Generating Sets

