

**MACGEN**<sup>TM</sup>  
POWER GENERATION LTD.

PRODUCT RANGE

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# ABOUT US

A leading UK power generation specialist providing sales, service and maintenance of mobile & static generator units to clients worldwide.

MacGen Power Generation was founded in 1958. A family owned company MacGen is located in Kilrea, Northern Ireland. Operating from modern purpose built premises totalling over 20,000 square feet, MacGen generators are exported worldwide.

The company employs only fully qualified personnel to deal with all aspects of sales and service of generators, MacGen also holds a large and varied stock of Generating Sets and a full range of parts & spares for generators available.

MacGen offer a range of gensets from 13kVA to 500kVA suitable for all applications including supermarkets, hotels, factories, schools and fleet rental.

MacGen also offer Openskid sets and Supersilenced Sets which comply with current European standards for generators, together with Keystart or Automatic Mains Failure options.



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# SERVICING & SUPPORT

## Warranty Support

MacGen provide full warranty on all its machines covering 12 months subject to conditions. As a leading supplier of diesel generator sets MacGen have a policy that customer care is top priority. For this reason MacGen guarantees high quality service and backup support to all customers.

MacGen have earned a reputation for service and engineering expertise. With growing demand for specialist maintenance our customers can be assured that we are completely equipped to undertake all service and modification work, both electrical and mechanical. Service contracts can be individually tailored to the customers requirements. With our load banking facilities we can load test machines for full load capability and general testing requirements.

## Parts & Servicing

To ensure the provision of power from your generator, the MacGen service network can quickly provide parts, service and technical support, together with a next day delivery service on stocked items for orders placed before 1pm.

## Simplicity Where It Matters

Our generator control systems are easy to use, and yet allow for a high degree of customisation and control. Our technical support staff are happy to provide user information on any of our generator sets.

## Environmental Awareness

MacGen generators are specifically designed to provide reliable power, whilst being environmentally friendly. Our internally housed, heavy duty fuel tanks add high levels of protection from fluid loss. Our silenced sets also provide the lowest levels of noise contamination. MacGen generators are fully compliant with: 89/336/EEC, EN292-1, EN292-2, EN294, EN60204 AND prEN563.

## Availability of Stock

MacGen hold large volumes of generators including YANMAR , IVECO and SCANIA machines, to provide fast turn-around times on all our orders. We aim to provide you with power whenever and wherever you need it without delay.



**PROFESSIONAL RANGE**





MacGen

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PORT JIGGER



# STANDARD FEATURES

## COMPACT & LIGHTWEIGHT

MacGen provide their range in one of the most compact & lightweight packages. This provides reliable power with a low impact design to suit any application or site.

## CEM CONTROLLER

Generators up to 30kVA output size are provided as standard with an analogue control panel, the complete range of MacGen sets can be supplied with our CEM Electronic controller / display panel. (30kVA & above include CEM as standard).

## CANOPY

The MacGen weatherproof canopy type covers the entire range of generators, providing full protection for the generators, internal parts and also ensures the highest levels of soundproofing to comply with all European standards.



## ROUNDED CORNERS

The outer canopy incorporates rounded corners to add structural strength and also prevents corrosion through paintwork damage.

## FITTINGS

The full MacGen range come with high quality stainless steel hinges, handles and fittings, protecting them from the elements for the whole life of the product.

## BUNDED BASES

MacGen generators come with centred fully banded bases incorporating 110% fluid containment.

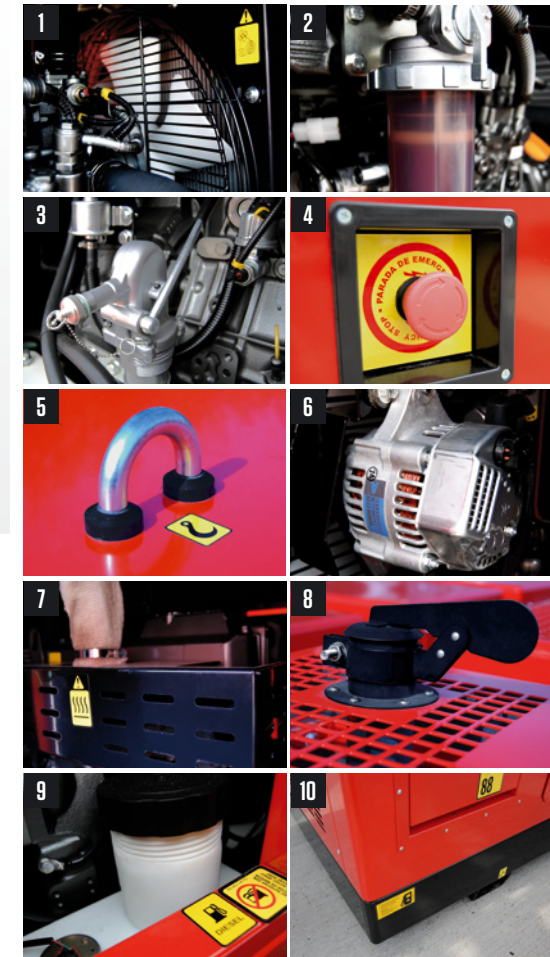
## MOBILITY

For ease of mobility our range of generators come complete with heavy duty forklift pockets and a central lifting point on top of the set.

# MPG 13-40 kVA

STANDARD SOUNDPROOF | 400 - 230 V

POWERED BY  **YANMAR**



- 1. Radiator with pusher fan
- 2. Decanting filter
- 3. Emergency Push Button
- 4. Oil sump extraction kit
- 5. Central lifting hook
- 6. Battery charging alternator with earth connection
- 7. Exhaust rain cap
- 8. Mobile & hot protection fan & front radiator protection.
- 9. Fully tight chassis that works as liquids retention basin. Includes fuel tank.
- 10. Forklift pocket.

Photographs shown are of 30kVA machine



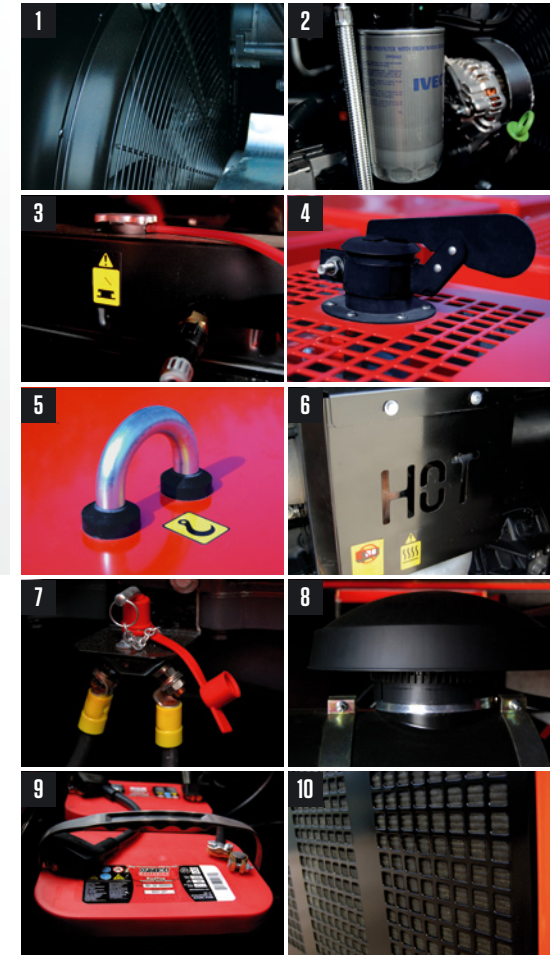
# TECHNICAL SPECIFICATIONS

Model	MPG13	MPG20	MPG30	MPG40
Prime Output (kVA)	13	20	31	41
Standby Output (kVA)	14	22	33	45
Frequency (Hz)	50	50	50	50
Available Voltages (V)	230	230/400	230/400	230/400
Sound Level @ 7 metre dB (A)	59	61	61	61
Alternator Type	STAMFORD*	STAMFORD*	STAMFORD*	STAMFORD*
Insulation Class	H	H	H	H
Control Panel Type	M6	CEM	CEM	CEM
Alternator Output (Amps/Phase)	22	29	45	59
Engine Model	3TNV88	4TNV84TGGE	4TNV98GGE	4TNV98TGGE
Prime power (kW)	11	18	27	36
No. of Cylinders (T) Turbo	3	4(T)	4	4(T)
Electrical System (V)	12	12	12	12
Fuel Tank Capacity (l)	23	38	60	65
50% Load Fuel Consumption	2.31	2.67	4.2	5.3
Run time @ 50% Load	9.95	14.23	14.28	12.26
Overall Length (mm)	1475	1920	2000	2250
Overall Width (mm)	750	900	950	1050
Canopy Height (mm)	1110	1230	1270	1450
Dry Weight	691	720	905	1081

# MPG 60-400 kVA

STANDARD SOUNDPROOF | 400-230 V

POWERED BY 



- 1. Radiator with pusher fan
- 2. Decanting filter
- 3. Low coolant level sensor \*
- 4. Exhaust rain cap

- 5. Central lifting hook
- 6. Mobile & hot protection fan & front radiator protection.
- 7. Battery isolator \*
- 8. Dry Air Filter

- 9. Starting batteries, incl. cables & rack. Battery terminals protection.
- 10. Sound attenuated canopy, with high density rockwool. Wide doors & manholes for water/ oil, in case of necessity.

\* OPTIONAL FEATURE

Photographs shown are of 250kVA machine

# TECHNICAL SPECIFICATIONS

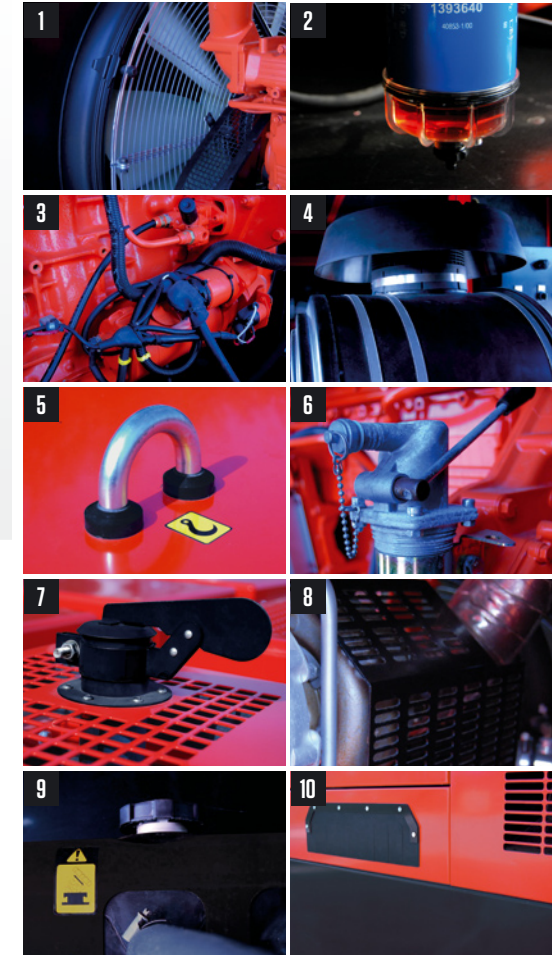
Model	MPG60	MPG75	MPG100	MPG125	MPG160	MPG200	MPG250	MPG300	MPG350	MPG400
Prime Output (kVA)	60	75	100	130	160	200	250	300	350	400
Standby Output (kVA)	63	80	108	143	175	220	275	330	390	440
Frequency (Hz)	50	50	50	50	50	50	50	50	50	50
Available Voltages (V)	230/400	230/400	230/400	230/400	230/400	230/400	230/400	230/400	230/400	230/400
Sound Level @ 7 metre dB (A)	64	64	66	70	70	72	71	72	72	72
Alternator Type	STAMFORD*	STAMFORD*	STAMFORD*	STAMFORD*	STAMFORD*	STAMFORD*	STAMFORD*	STAMFORD*	STAMFORD*	STAMFORD*
Insulation Class	H	H	H	H	H	H	H	H	H	H
Control Panel Type	CEM	CEM	CEM	CEM	CEM	CEM	CEM	CEM	CEM	CEM
Alternator Output (Amps/Phase)	87	106	144	188	231	289	361	433	505	578
Engine Model	NEF45SM1	NEF45SM2	NEF45TM2	NEF67TM2	NEF67TM3	NEF67TE2	C87TE1D	C10TE1D	C13TE2	C13TE3
Prime power (kW)	50	64	86	114	140	176	220	264	312	352
No. of Cylinders (T) Turbo	4(T)	4(T)	4(T)	6(T)	6(T)	6(T)	6(T)	6(T)	6(T)	6(T)
Electrical System (V)	12	12	12	12	12	12	24	24	24	24
Fuel Tank Capacity (l)	165	165	165	225	225	225	445	590	590	590
50% Load Fuel Consumption	7.0	8.6	11.0	14.6	18.0	22.5	26.11	32.34	36.87	41.46
Run time @ 50% Load	24.00	19.53	15.27	15.48	12.56	10.04	17.20	18.46	16.19	14.40
Overall Length (mm)	2750	2750	2750	3300	3300	3300	3800	4100	4100	4100
Overall Width (mm)	1100	1100	1100	1200	1200	1200	1400	1600	1600	1600
Canopy Height (mm)	1640	1640	1640	1925	1925	1925	2300	2200	2200	2200
Dry Weight	1525	1550	1670	2295	2365	2435	3840	4135	4295	4480



# MPG 250-500 kVA

STANDARD SOUNDPROOF | 400 V

POWERED BY  **SCANIA**



- 1. Radiator with pusher fan
- 2. Decanting filter
- 3. Battery Isolator \*
- 4. Dry Air Filter
- 5. Water Jacket Heater \*

- 6. Oil sump extraction kit
- 7. Exhaust rain cap
- 8. Mobile & hot protection fan & front radiator protection.
- 9. Low coolant level sensor \*

- 10. Outlet for power cables & chassis ready for later mobile kit installation or rental skid.

\* OPTIONAL FEATURE

Photographs shown are of 500kVA machine

# TECHNICAL SPECIFICATIONS

Model	MPG500
Prime Output (kVA)	502
Standby Output (kVA)	550
Frequency (Hz)	50
Available Voltages (V)	230/400
Sound Level @ 7 metre dB (A)	75
Alternator Type	STAMFORD*
Insulation Class	H
Control Panel Type	CEM
Alternator Output (Amps/Phase)	725
Engine Model	DC1645A
Prime power (kW)	440
No. of Cylinders (T) Turbo	8V(T)
Electrical System (V)	24
Fuel Tank Capacity (l)	740
50% Load Fuel Consumption	50.17
Run time @ 50% Load	14.75
Overall Length (mm)	4500
Overall Width (mm)	1800
Canopy Height (mm)	2340
Dry Weight	5520

## OPTIONAL FEATURES FOR PROFESSIONAL RANGE

- Customised Color
- Autostart Package
- Electronic Governor
- Switchable Dual Frequency Capability
- Heavy duty Impregnated Alternator (Marine)
- Road Trailer
- Low-Level Coolant Shutdown
- Synchronised Capabilities
- Auto Transfer Switch (ATS)
- Extended Fuel Tank (Litres)
- Fuel Tank Separator
- Earth Rod & Cable
- Water Jacket Heater
- Distribution Box
- Battery Charger
- Battery Isolator





MacGen

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PORT  
DOCK



**RENTAL RANGE**

# READY TO RENT RANGE

All MacGen generators are designed to be used with confidence for any inexperienced person to work with them in the rental marketplace.

The controls and protection are simple and intuitive to use, including alarms and protections pre-configured for daily work.

## FEATURES

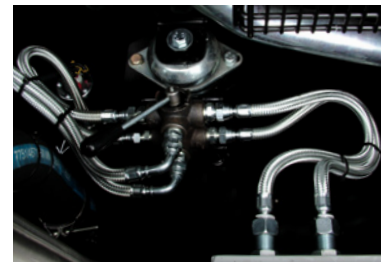
Specifications are as per professional range with the following additions:



Heavy duty lift & drag points



Distribution box  
with IP67 waterproof sockets



3 Way Bulk Tank Kit  
complete with external  
fuel connections



Heavy duty door handles

## OPTIONAL FEATURES FOR RENTAL RANGE

- Customised Color
- Switchable Dual Frequency Capability
- Low-Level Coolant Shutdown
- Autostart Package
- Road Trailer
- Synchronised Capabilities
- Water Jacket Heater
- Battery Charger
- Battery Isolator
- Auto Transfer Switch (ATS)

# BENEFITS

All MacGen generators are treated with thicker paints to withstand corrosive environments, carrying more resistance over time (guaranteed by salt spray test, more than 1,000 hours).

They are designed to operate in extreme environmental conditions (temperature, humidity, adverse weather conditions). It's sturdy construction and strict compliance with environmental regulations, making them optimal for a wide range of applications and industries. (Construction, public works, hire and work in extreme conditions.)



# TRANSPORTATION

The carriage drive is built into the bed structure, which forms the chassis of the set. By integrating chassis and retention tray in a single element it optimizes and reduces the overall size of the machine.

It's compact & robust structure allows for easy movement & transportation, either by:

- The drag chains reinforced tubes front and rear of the chassis
- Central top lifting hook
- Fork truck through the slots on the chassis.

# ENVIRONMENTAL

The rental range features a completely sealed chassis able to retain and prevent loss of fluid to the outside.

Due to its small size, which maximizes the transport capabilities, thus reduces the environmental impact.

The engines used in the rental range comply with the regulations on emission of gaseous and particulate pollutants (97/68/EC amended by 2002/88/EC and 2004/26/EC)

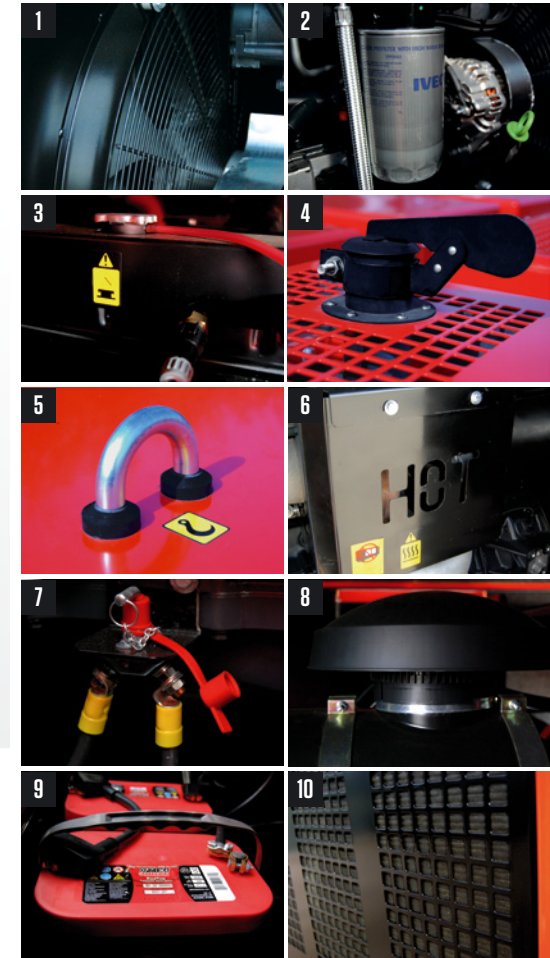


# MPG 20-200 kVA

STANDARD SOUNDPROOF | 400-230 V



## MPG 20-40 kVA



1. Radiator with pusher fan
2. Decanting filter
3. Low coolant level sensor
4. Exhaust rain cap
5. Central lifting hook
6. Mobile & hot protection fan & front radiator protection.
7. Battery isolator (Optional)
8. Dry Air Filter
9. Starting batteries, incl. cables & rack. Battery terminals protection.
10. Sound attenuated canopy, with high density rockwool. Wide doors & manholes for water/oil, in case of necessity.

POWERED BY  **FPT IVECO**  **YANMAR**

# TECHNICAL SPECIFICATIONS

Model	MPG20	MPG30	MPG40	MPG60	MPG75	MPG100	MPG125	MPG160	MPG200
Prime Output (kVA)	20	34	41	60	73	100	130	160	200
Standby Output (kVA)	22	37	45	63	80	108	143	175	220
Frequency (Hz)	50	50	50	50	50	50	50	50	50
Available Voltages (V)	400	400	400	400	400	400	400	400	400
Sound Level @ 7 metre dB (A)	55	62	62	65	64	66	70	70	72
Alternator Type	STAMFORD*	STAMFORD*	STAMFORD*	STAMFORD*	STAMFORD*	STAMFORD*	STAMFORD*	STAMFORD*	STAMFORD*
Insulation Class	H	H	H	H	H	H	H	H	H
Control Panel Type	CEM	CEM	CEM	CEM	CEM	CEM	CEM	CEM	CEM
Alternator Output (Amps/Phase)	29	45	59	87	106	144	188	231	289
Engine Model	YANMAR	YANMAR	YANMAR	YANMAR	FPT IVECO	FPT IVECO	FPT IVECO	FPT IVECO	FPT IVECO
Prime power (kW)	16	27	33	48	58	80	104	128	160
No. of Cylinders (T) Turbo	4	4	4	4	4	4	6	6	6
Electrical System (V)	12	12	12	12	12	12	12	12	12
Fuel Tank Capacity (l)	100	100	100	285	285	285	495	495	495
50% Load Fuel Consumption	2.67	4.2	5.3	7.0	8.6	11.0	14.6	18.0	22.5
Run time @ 50% Load	37.45	23.80	18.86	40.71	33.13	25.90	33.90	27.50	22
Overall Length (mm)	2250	2250	2250	2810	2810	2810	3360	3360	3360
Overall Width (mm)	1100	1100	1100	1150	1150	1150	1250	1250	1250
Canopy Height (mm)	1348	1348	1348	1780	1780	1780	1880	1880	1880
Dry Weight	975	1130	1140	1780	1780	1800	2280	2325	2370

# MOBILE TRAILER UNITS

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The MacGen range of generator units are available on mobile road-tow chassis up to 200kVA\*.

Fully galvanised and constructed from folded steel, these units provide much needed portability where necessary.

Supplied with all electrical lights and connections and a choice of towing hitches, the mobile generator is ready to move whenever it is needed, supplying reliable power in the most flexible way.

\* Weight restrictions may apply



**CONTROLLERS**



# CEM CONTROLLER

MODELS: MPG35-500

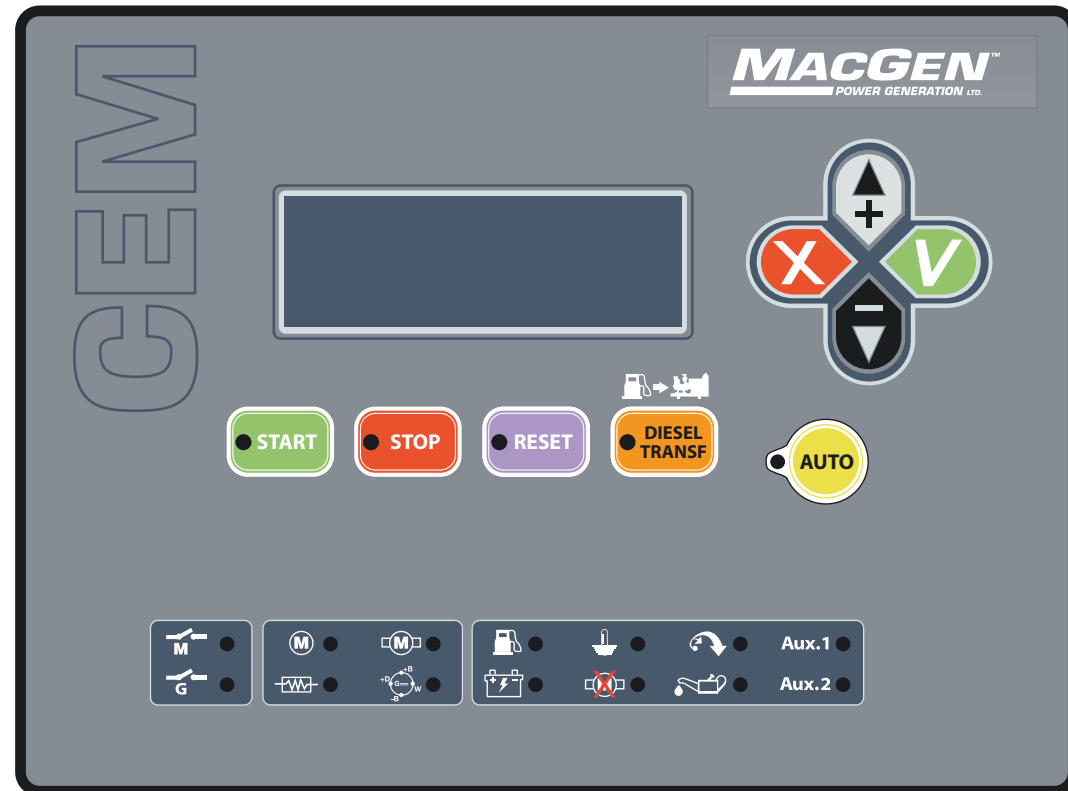
The central CEM is a team of power monitoring and control through set. The plant consists of two different modules:

## Display Module

Make the information work of the state of the generator and allow the user to command, plan and configure the operation of the plant. It consists of a backlit display and various LEDs for monitoring the status of the plant and buttons that allow users to central command and schedule.

## Action Module

Make the supervision and control of the plant. This module is located at bottom of panel to reduce wiring and thus increase plant immunity against electromagnetic noise. All signals, sensors and actuators are wired to the module of measures. The connection between the module and display action is via a CAN communication bus, allowing the interconnection of additional modules which guarantees the scalability of the plant.



# CEC CONTROLLER FOR AMF PANEL

MODELS: MPG13-500

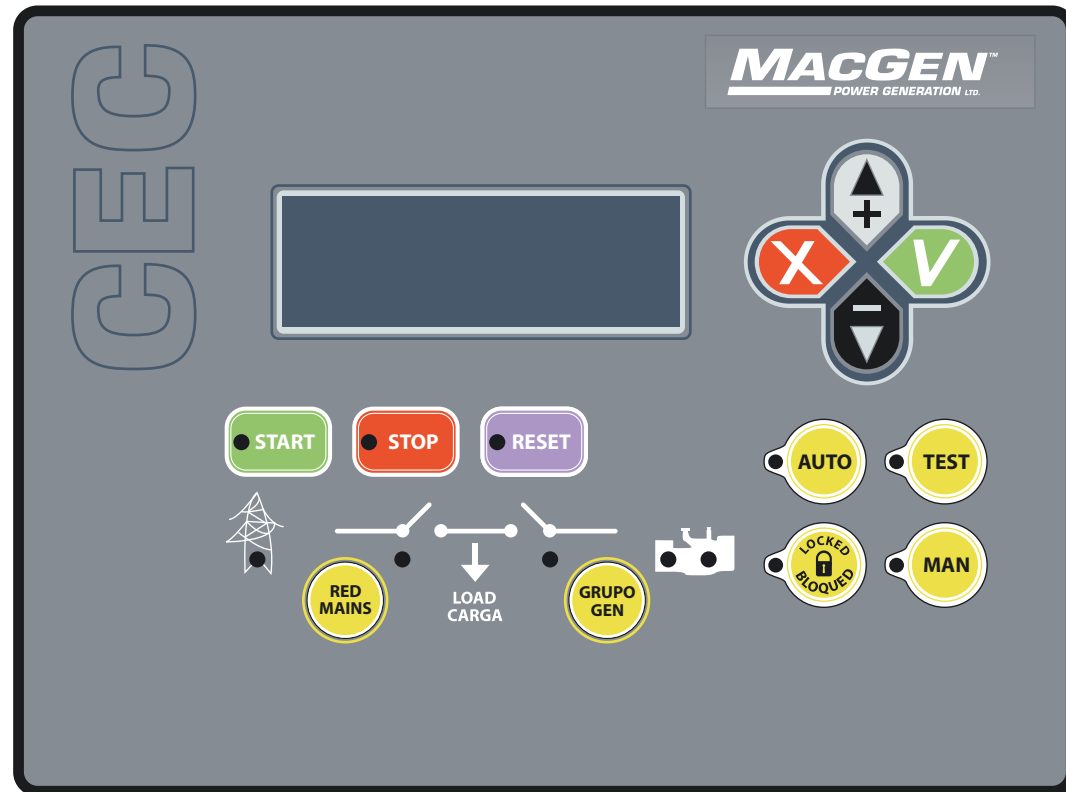
The CEC central monitoring team is a network signal and power monitoring and control through the set. The plant consists of two different modules:

## Display Module

Performs tasks of device status information and allow the user's actions, through the display modules the user can command the central and plan and configure their operation. It consists of a backlit display and various LEDs for monitoring the status of the plant and buttons that allow users to central command and schedule.

## Measure Module PHR6

The measure module is responsible for performing the tasks of monitoring and control of the plant. This module is located at bottom of panel to reduce wiring and thus increase plant immunity against electromagnetic noise. All signals, sensors and actuators are wired to the module of measures. The connection between the module and display action is via a CAN communication bus, allowing the interconnection of additional modules which guarantees the scalability of the plant.



# M6 CONTROL PANEL

## MODELS: MPG13

- Small size.
- Plug strips.
- Key starter.
- Outputs shorted.
- Warm up output.
- Alarm output.
- Programming by microswitches  
(Reserve fuel, Warming, Cooling, Generator or Pick-Up, Overspeed, Motor launched by D +)
- Entry Emergency Stop.
- Aux free.
- Overspeed Protection

Includes the possibility of starting the engine manually or automatically (by voltage free contact) and protect against possible damage during operation.

The management is done through a microcontroller-based electronic circuit, which is located inside the plant.

On the front incorporates a power switch the power off, a reset button, a mode selection key MANUAL, AUTO or STOP and 14 LEDs.

In the back has: 18 Plug-in connection terminals spread over two blocks, six micro-switches and a port RJ11 programming for programming and query historical alarm and meter.





**LIGHTING TOWERS**

# MLT4 MOBILE LIGHTING TOWERS

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## COMPACT. COUNTERBALANCED. CONTROL.

### Key features:

Composed of a tower kit and a generating set, embedded in compact and equilibrated mobile equipment, the key features of the MLT4 Mobile Lighting Towers are:

- 9m Vertical Action Hydraulic extended Mast height
- 1,500 rpm Yanmar Water Cooled Diesel Engine
- 4 x 1000 Watt Metal Halide Floodlights
- Integral 4-Point Stabiliser System
- Up to 80 hours runtime



# TECHNICAL SPECIFICATION

## MLT4 Specification

Voltage	230V (110V optional)
Rated Speed	1,500rpm
Engine model	Yanmar 3TNV 76
Cylinders	3L
Prime Power (PRP) kVA/kW	8 / 6.4

## Metal Halide Lamps

N degrees Lamp x Watts Each	4 x 1,000
Lumens per Lamp	90,000
Type of Light	White
Total Tower Lumens	360,000

## Characteristics

Max. Dimensions (l x w x h)	2.22m x 1.26m x 2.2m
Min. Dimensions (l x w x h)	2.22m x 2.45m x 9m
Weight	911kg
Fuel Tank	110L



# NOTES







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