



# We look to the future as a leader of the energy generation

We lead the evolution to more resilient, efficient and sustainable energy solutions, having a broad suite of products that support the path towards the global energy transition. Our wide range of products helps operators to reduce fuel consumption and CO<sub>2</sub> emissions.

We are committed to deliver **clean** and **efficient solutions** across a wide range of commercial and domestic applications.

Pramac provides the widest range of hybrid and environmentally friendly power products, including: generators, tower lights and battery energy storage solutions.

# The widest choice of hybrid and environmentally friendly power and lighting solutions

Our professional and innovative approach, guarantees products of unquestioned reliability and with high technical performances.



# Stage V Compliant

The Stage V is a "green" initiative, aiming to reduce the pollutants emitted by the engine.

The European Union imposes, for the mobile market of the generating sets, the introduction of highly technological engines, capable to reduce the particulate matter produced by the machines. This means reduction of the global atmospheric pollution, as an important commitment for the environment and health of our planet.

Pramac Stage V generator sets are equipped with advanced engine technologies to meet the latest European regulations for emissions of gaseus and particulate pollutants (EU Regulation 2016/1628), offering a robust and easy maintenance design which places the products as a top of the range in the rental business.

### Solutions by product series

GPW Series	9-100 kVA
<b>GRW</b> Series	60-550 kVA
GQW Series	1.4 MVA



The Stage V Pramac generators are specifically designed for the rental business. They feature FPT, Volvo and Scania premium engine brands, which includes the **After-Treatment System** (ATS), to guarantee the **emissions reduction**, in compliance with EU Regulation 2016/1628 for all mobile application.



#### **EXHAUST GAS**

Exhaust gas comes out of the engine as yet untreated but already with reduced emission levels thanks to an efficient electronically controlled engine and a common rail injection system.



### MBS | MANUAL BATTERY SWITCH

Manual Battery Switch equipped with LED indicator that alerts the completion of the ATS cleaning process after the generator stops to prevent the DPF clogging.



### DIESEL EXHAUST FLUID TANK

The DEF tank is sized to cover at least the range provided by the fuel tank. An optional heating system is available for the DEF tank to prevent the urea from freezing.



### DOC | DIESEL OXIDATION CATALYTIC

The DOC reduces the amount of CO and increases the percentage of NO<sub>2</sub>.

### DPF | DIESEL PARTICULATE FILTER

Soot particles (PM) of exhaust gas are trapped by the DPF, then burned off through a process of regeneration.

### SCR | SELECTIVE CATALYST REACTOR

A special ceramic catalyst uses DEF to convert nitrogen oxide (NOX) into nitrogen (N<sub>2</sub>) and water (H<sub>2</sub>O).



### QUICK FUEL AND DEF CONNECTORS

The Quick Fuel and DEF tank connectors allow the rapid increase of the autonomy of the generator through an external tank. Available as supplement.

The components listed on this page can be mounted on the generator depending on the final scope of supply and the size of the genset.

### **GPW** Series

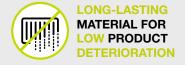
The GPW philosophy offers a high degree of versatility and allows for the most suitable configuration to be achieved according to real operational needs: local regulations, site specs, application and usage.

The core design and the wide list of options make the generator adaptable to several specific needs:

- Multiple solutions for power output/distribution > bus bar, sockets, power lock
- Canopy and base designed for easy handling
- General arrangement and large service access make for simple and efficient maintenance tasks
- Extra Silent enclosure for urban construction areas and events available as option

# **Environmentally** Friendly







### Glocal Philosophy

A modular design offers maximum configurability to adapt the generator to a large variety of requirements based on specific customer needs, final purpose and local regulations.



# Several configurations, responding to tomorrow's operational challenges:

- High quality standards and reliability with a specific design suitable for mobile applications
- A modular design allows high flexibility on scope of supply, with a wide range of mechanical and electrical options







#### Easy handling and transport

Overall dimensions designed to optimize load space in a container and on a truck. A single roof lifting point and additional four lifting points located in the baseframe allow the genset to be moved by crane. Bolted feet also allow the genset to be handled by forklift. Galvanized skid base with forklift pockets available as option.



### Several fuel tank sizes available

Three fuel tank options available with different levels of autonomy, in polyethylene and metal: 8h, 12h, 24h.



### Easy service and maintenance

Designed for easy ordinary and extraordinary maintenance.

Three large doors allow access to all service points.

**Detachable battery** access panel for quick starter battery service.



### DSE- Cutting edge control panel

Complete segregation
between control and power
sections, by means of two
separate metal cabinets.
Control and power sections
able to house digital/analogue
instrumentation and robust
busbar. Modular design allows
for high flexibility of the scope

of supply.



#### Socket panel

Sockets panel positioned in the frontal side and separated from the control/power cabinets with high flexibility on sockets combination.

Ideal for easy and fast power connection.



#### **High Protection**

Designed to guarantee **high safety standards** for the operator.

Weatherproof enclosure with **high protection** against water and dust ingress, thanks to special metal air inlet.

**Key lockable** doors avoid unauthorized access.

# Technical data

Referred to 400V three-phase 50Hz models

Models	PRP [kVA]	Engine	Alternator	Fuel Tank [L]*	Dimensions LxWxH [mm]**	Control unit
GPW9P/FS5	9	Perkins	Mecc Alte	poly 8h/ metal 8-24h	1813x933x1313	DSE4520MKII / DSE7320MKII
GPW9Y/FS5	9	Yanmar	Mecc Alte	poly 8h/ metal 8-24h	1813x933x1313	DSE4520MKII / DSE7320MKII
GPW13Y/FS5	13	Yanmar	Mecc Alte	poly 8h/ metal 8-24h	1813x933x1313	DSE4520MKII / DSE7320MKII
GPW18Y/FS5	18	Yanmar	Leroy Somer/Mecc Alte	poly 8h/ metal 8-24h	1813x933x1313	DSE4520MKII / DSE7320MKII
GPW20P/FS5	20	Perkins	Leroy Somer/Mecc Alte	poly 8h/ metal 8-24h	1813x933x1313	DSE4520MKII / DSE7320MKII
GPW35Y/FS5	35	Yanmar	Leroy Somer/Mecc Alte	poly 8h/ metal 8-24h	2200x1020x1423	DSE7320MKII / DSE8620MKII
GPW45Y/FS5	43	Yanmar	Leroy Somer/Mecc Alte	poly 8h/ metal 8-24h	2200x1020x1423	DSE7320MKII / DSE8620MKII
GPW60I/FS5	60	FPT	Leroy Somer/Mecc Alte	poly 8h/ metal 8-24h	2437x1033x1743	DSE7320MKII / DSE8610MKII
GPW80I/FS5	83	FPT	Leroy Somer/Mecc Alte	poly 8h/ metal 8-24h	2757x1120x1846	DSE7320MKII / DSE8610MKII
GPW100I/FS5	100	FPT	Leroy Somer/Mecc Alte	poly 8h/ metal 8-24h	2757x1120x1847	DSE7320MKII / DSE8610MKII

<sup>\*</sup> Multiple tanks available in polyethylene and metal.
\*\* Dimensions might change, due to different tanks and supplements.



### **GRW** Series

### Robust quality engineered for extended life High performance across strategic services and events

The GRW series is designed to work across a wide variety of applications where temporary power supply is needed. These generators are the ideal solution for rental companies thanks to their versatility, high structural resistance and efficency. Fast servicing and refueling. User-fiendly with high degrees of protection and safety for operator. Low noise emissions and easy access.for maintenance.



### **Low Opex**

- Base frame equipped with anchor points, forklift pockets, pull bars
- Single lifting point
- Control panel single interface area
- High quality fuel system with 6-way fuel valve
- Large metal fuel tank (up to 24h autonomy) with double refilling point, one for each side
- DEF tank is inside the machine and covers the same operating time as the diesel tank.



#### **Durability**

- More than 1000h tested salt spray resistant canopy
- **(b)** Cutting edge components
- Robust design to withstand the toughest of environments
- Sturdy doors with internal metal grid and top premium whashable soundproof material



### **Eco friendly**

- Compatible engines with Hydrotreated Vegetable Oil (HVO)
- Fully bunded base frame able to retain 110% liquids complete withleak detection sensor
- Heavy-duty diesel engines compliant with Stage V emission level and equipped with electronic governor
- High quality materials with low impact recycling equipment



#### **High protections**

- Fully waterproof air inlet openings
- Synchronous brushless alternator with reinforced insulation
- Additional fuel filter
- Safety and protection guaranteed battery switch





#### Long lasting - long running

- More than 1000h tested salt spray resistant canopy
- Large metal fuel tank (up to 24h autonomy)
   with double refilling point, one for each side
- Cutting edge components
- Robust design to withstand the toughest of environments
- Sturdy doors with internal metal grid



#### Easy service

- Wide access doors and double fuel refilling points for easy maintenance
- Base frame equipped with anchor points, forklift pockets and pull bars\*
- Single lifting point
- Control panel single interface area
- High quality fuel system with 6-way fuel valve
- \* Final scope of supply according to genset size



#### **High protection**

- High quality thermal insulation
- Fully waterproof air inlet openings
- Synchronous brushless alternator with reinforced winding insulation
- Additional fuel filter
- Safety and protection guaranteed battery switch



#### Low environmental impact

- High density sound proofing for sensitive environments
- Fully bunded base frame able to retain 110% liquids complete with leak detection sensor
- Heavy-duty diesel engines compliant with Stage V emission level and equipped with electronic governor
- High quality materials with low impact recycling equipment

# Control panel

#### **Automatic and parallel**

The control panel is intuitive and user-friendly, features high protection and makes customizations easier. The GRW uses Automatic Control Panel (ACP) and Modular Parallel Panel (MPP).





### **CONTROL SECTION** With dual-level access to components

- Cutting edge controller with colour screen
- Alternator AVR
- Battery charger
- Adjustable earth fault current protection
- Mechanical hours counter
- Fuel level meter



#### **POWER SECTION**

#### High protection, segregate from control section

- Door open switch with circuit breaker tripping
- Bus bar for power cables connection
- Four-pole circuit breaker
- Power Locks option



#### **SOCKET SECTION**

#### Several combinations available

- Sockets panel provides high flexibility on sockets combination. Ideal for easy and fast power connection
- 2-wires start/stop multi pin connector for synchro (parallel panel)
- Multi pin connector for synchro (parallel panel)



#### **DEEP SEA**

Cutting edge user-friendly interface, increasing product's reliability and flexibility

# Technical data

Referred to 400V three-phase 50Hz models

Models	PRP [kVA]	Engine	Alternator	Fuel/DEF Tank [L]	Dimensions LxWxH [mm]	Control unit
GRW60I/S5	60	FPT	Leroy Somer	280/NA	2400x1200x1630	DSE7320MKII / DSE8610MKII + DSE8003
GRW80I/S5	80	FPT	Leroy Somer	540/43	2800x1200x2035	DSE7320MKII / DSE8610MKII + DSE8003
GRW100I/S5	100	FPT	Leroy Somer	540/43	2800x1200x2035	DSE7320MKII / DSE8610MKII + DSE8003
GRW150I/S5	150	FPT	Leroy Somer	310/43	3460x1200x2050	DSE7320MKII / DSE8610MKII + DSE8003
GRW200I/S5	204	FPT	Leroy Somer	310/43	3460x1200x2050	DSE7320MKII / DSE8610MKII + DSE8003
GRW250I/S5	250	FPT	Leroy Somer	800/80	4165x1500x2130	DSE7320MKII / DSE8610MKII + DSE8003
GRW300I/S5	307	FPT	Leroy Somer	800/80	4165x1500x2130	DSE7320MKII / DSE8610MKII + DSE8003
GRW350S/S5	353	Scania	Leroy Somer	1500/155	4630x1600x2450	DSE7320MKII / DSE8920MKII
GRW400S/S5	406	Scania	Leroy Somer	1500/155	4630x1600x2450	DSE7320MKII / DSE8920MKII
GRW450S/S5	455	Scania	Leroy Somer	1500/155	4630x1600x2450	DSE7320MKII / DSE8920MKII
GRW500S/S5 SS	509	Scania	Leroy Somer	1500/155	4630x2100x2450	DSE7320MKII / DSE8920MKII
GRW550S/S5 SS	561	Scania	Leroy Somer	1500/155	4630x2100x2450	DSE7320MKII / DSE8920MKII

<sup>\*</sup> Multiple tanks available in polyethylene and metal.
\*\* Dimensions might change, due to different tanks and supplements.

# **Hybrid** solutions

Hybrid Power Module (HPM) allows the use of smaller generator that runs for shorter time, lowering service and refuelling needs, in order to give a longer and more efficient life to the machines.

- All-in-one enclosure, compact solution
- Innovative solution for a mobile hybrid generator
- Combination of diesel AC genset with hybrid power module (HPM, batteries and power electronic converter)
- Advanced power electronic DC/AC conversion with Li-ion batteries
- Advanced Stage V engine technology
- Compatible engines with Hydrotreated Vegetable Oil (HVO)





### All-in-one: Diesel, Hybrid, Plug in

The GRW Hybrid series is a Hybrid genset in a compact all-in-one package. It is efficient, reliable and reduces significantly the OPEX, with a vast choice of available operating modes that allow the correct selection according to site specificities, such as, events, constructions, working sites or city centers.

The hybrid philosophy of this rental solution has many advantages for the operators, such as:

- Avoid running diesel genset with low loads increasing the rigeneration time interval of Stage V engines
- Best efficiency when needed
- Covering power peaks, with batteries
- Reducing fuel consumption and CO<sub>2</sub> emissions up to 50% (with typical load profiles for construction sites)
- Lowering noise emissions

### **Automatic control panel**

with control, power and socket section



JB: just battery, silent mode for load below HPM nominal power

**ECO**: genset is switched on over a programmable power threshold: below this threshold just the HPM supplies the load

**FULL**: genset always on, the battery stores as much energy as possible, ready to provide power in case of load peaks

**BATTERY CHARGE MODE**: dedicated plug for battery charging from the grid

**EPS**: battery always full; genset supplies power to the load and HPM as backup power

🌔 JE: just engine mode

### Technical data

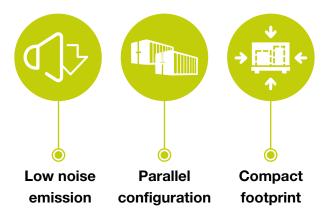
System Output	400VAC Three Phase 50Hz				
Diesel genset	61kVA ESP	60kVA PRP			
Max power	82kVA				

### GQW **1450**V

Compact and versatile power generation up to 1.4 MVA Prime Power with two generating sets inside a 20-foot HC container. This solution guarantees greater performance, lower fuel consumption and high power density. High efficency thanks to dual genset solution with single or parallel operation according to load profile, allowing to reduce fuel consumption and extend engine lifespan.



- High power density
- High performances as load variation response
- Multiple and modular solution for power plants
- Possibility to run generators independently or in parallel
- Dual power solution with compact footprint

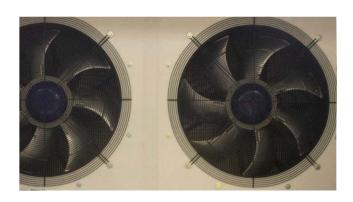






#### High return on investment and easy maintenance

- Load optimization of two motors by sharing and synchronization
- Total access to all components
- Fast access to the High Duty Filter, which simplifies maintenance and replacement
- Easy general maintenance, both periodic and extraordinary



#### **Performance Report**

- Climate safe: the machines are able to cope in extremely high temperature conditions thanks to an innovative tropicalized design
- Low noise pollution: the use of four eletric fans with two radiators keeps noise pollution low all the time
- Top in class: maximum higher power compliance Stage V
- Accessibility: easy access to fuel, DEF and a quick fit for external tanks
- After treatment: Selective Reduction Catalyst (SCR) and Diesel Oxidation Catalyst (DOC) are included, while the Diesel Particulate Filter (DPF) is excluded to avoid any downtime due to forced regeneration.

### Technical data

Model	GQW 1450V/S5
PRP 50/60Hz [kVA]	1330/1480
Engine	Volvo
Alternator	Mecc Alte
Fuel Tank (I)	1800
DEF tank (I)	2x160
Dimension LxWxH [mm]	6060x2440x2900
Control unit	DSEG8003 + 2x DSE8610

# Deep Sea controllers

Pramac features Deep Sea control units across his innovative product lines to increase reliability and flexibility with a user-friendly interface.

Generator set controllers play a key role in management and proper operation of power system:

- Help protecting generator set from possible failure, guaranteeing high reliability and quick power response in all key applications
- Reduce and optimize operation and maintenance costs thanks to complete monitoring of several parameters and scheduling maintenance alarms
- Monitor generator sets anywhere 24/7, protecting genset against theft or movement using GPS

# SYNCHRONISING & LOAD SHARING AUTO START CONTROL MODULES

The DSE controllers represent the latest in complex load sharing & synchronising control technology. Designed to handle the most complex grid type generator applications these modules are packed with multiple features and benefits that are unrivalled across the generator control industry.



# AUTO MAINS (UTILITY) FAILURE CONTROL MODULES

DSE presents a powerful, new generation Auto Mains (Utility) Failure genset control module with a highly sophisticated level of new features and functions, presented in the usual DSE user-friendly format. These controllers are suitable for a wide variety of single, diesel or gas genset applications.





# Pramac is always by your side, with a dedicated after sales support

As a global company, the after sales team is made of people from different part of the world; this diversity and shared knowledge is an added value for the company and the customers as well.

Pramac assists customers providing service division offers, interventions on field, installations, repairing and rewinding support. The highly trained engineers and technicians undergo continuous training and quality programs, ensuring complete accordance with technical, quality, and regulatory standards.

Service and Parts indeed offers trainings and learning tools to help dealers and customers improving their product's technical knowledge and operational skills.

A global network for a wide offer of parts and after sales support



### Spare parts kit special offer

On-line spare parts order and interactive spare parts catalogues



#### Service support

Worldwide approved service network



### Scheduled maintenance kits

Personalised solutions with 24/7on call service



#### **Certified operators**

Dedicated training programs for users, maintenance and after sales service



#### Manuals and guides

A complete set of technical information, offering quick and efficient solutions



#### Online assets

A dedicated parts website to reach technical resources, place orders, and check the parts catalogue

www.pramacparts.com

Get the information you need, anytime and anywhere

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