



# VINCORION



TACTICAL POWER. HIGH EFFICIENCY.



## CONNECTED POWER SYSTEMS FOR TACTICAL OPERATIONS

PGM low emissions<sup>v</sup> & ESM hybrid<sup>v</sup> – 50 & 200 kW

**Efficient Power Supply. Maximum Mission Readiness.**  
The PGM low emissions<sup>v</sup> genset stands for Stage V technology and NATO compliance. When combined with the ESM hybrid<sup>v</sup> energy storage module, the result is a reliable integrated system that connects to existing grids and renewable energy sources, reduces emissions, and cuts operating costs. The system can be flexibly configured with PGM and ESM units in the 50 kW and 200 kW performance classes, making it possible to **scale performance as needed** and precisely adapt it to different deployment scenarios.

The **intelligent energy management** optimizes inter-connected operation and significantly increases efficiency, while multifuel capability provides additional flexibility when it comes to the fuel supply and reduces logistical dependencies. At the same time, the systems are **extremely easy to use and maintain**. Extended maintenance intervals combined with short maintenance times keep downtime to a minimum. This ensures availability, even under demanding operating conditions.

# MOBILE POWER SUPPLY. FLEXIBLE, DISTRIBUTED, RELIABLE.



## GENSET: PGM low emissions<sup>V</sup>

- Use of state-of-the-art Stage V engines, including exhaust aftertreatment systems, for efficient operation that reduces fuel consumption and emissions (noise, NO<sub>x</sub>, CO<sub>2</sub>)
- Compliance with NATO's Single Fuel Policy thanks to emission downgrade technology (MissionUpgrade)

## ENERGY STORAGE MODULE: ESM hybrid<sup>V</sup>

- Use of rugged lithium iron phosphate batteries (LiFePO<sub>4</sub>)
- Flexible feed-in: via PGM low emissions<sup>V</sup>, the power grid, solar panels, and other technologies
- Acts as an uninterruptible power supply (UPS)

### PGM low emissions<sup>V</sup> 50 and 200 kW

#### Technical Specifications

Power Rating:	50 / 200 kW
Voltage:	230 / 400V AC
Frequency:	50 Hz
Speed:	1,500rpm
Noise Level:	≤ 61 dB(A) @7m in Stage V operation
Weight (with equipment):	≤ 3.5 t (50 kW), ≤ 12.5 t (200 kW)
Operating Temperature:	-32 °C to +55 °C
Dimensions:	2,991 × 2,438 × 1,800 mm (50 kW), 1C-Container (200 kW)
Diesel Engine:	Stage V conformity
NSN:	PGM 50 kW: 6115124197804 PGM 200 kW: 6115124197783

### ESM hybrid<sup>V</sup> 50 and 200 kW

#### Technical Specifications

Power Rating:	50 / 200 kW
Voltage:	230 / 400V AC
Frequency:	50 Hz
Weight (with equipment):	≤ 3.5 t (50 kW), ≤ 12.5 t (200 kW)
Operating Temperature:	-32 °C bis +55 °C
Dimensions:	2,991 × 2,438 × 1,800 mm (50 kW), 1C-Container (200 kW)
Battery:	LiFePO <sub>4</sub>
NSN:	ESM 50 kW: 6130124198054 ESM 200 kW: 6130124198056

### Operating modes: Interconnected Operation for Maximum Flexibility

The systems can be operated in standalone, parallel, or interconnected mode (ModularGrid) with up to eight units from different performance classes. ModularGrid mode relies on intelligent energy management that enables load-dependent and demand-responsive operation. This greatly reduces the signature (heat, noise, and exhaust emissions).

The built-in energy storage system reliably covers short-term load peaks and fills in during supply interruptions. Furthermore, the galvanic isolation of the energy storage module from the public grid maximizes data and eavesdropping security, while significantly reducing fuel consumption, emissions, and logistical requirements compared to conventional diesel gensets.



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