



# DEFENSE

## THE NEXT GENERATION OF TACTICAL POWER SUPPLY. PGM low emissions<sup>v</sup> AND ESM hybrid<sup>v</sup>

# Cutting-edge energy systems for an efficient, mobile supply of power.

The ongoing advancement of the armed forces is increasing the demand for electricity in military operations. VINCORION's next-generation energy systems reliably meet this increased demand for power and offer tactical advantages through exceptional performance and intelligent energy management. The systems are flexible, low-maintenance, and meet the high demand for energy with minimal fuel consumption and replenishment logistics. VINCORION'S PGM low emissions<sup>v</sup> is an efficient genset with a Stage V engine and exhaust aftertreatment that ensures compliance with NATO Single Fuel Policy.

The ESM hybrid<sup>v</sup> is a rugged energy storage module that can be flexibly supplied with power from a variety of sources, such as a PGM, the grid, and renewable energies. Through intelligent energy management, the complete system saves fuel, reduces emissions, and minimizes wear in parallel and network operation.

### MOBILE POWER SUPPLY. FLEXIBLE, DISTRIBUTED, RELIABLE.



#### 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 Single Fuel Policy via Mission Upgrade (emission downgrade)

The systems can be operated individually, in parallel and in a network of up to 8 systems of different power classes (known as a **ModularGrid**). The ModularGrid works by means of an intelligent energy management system

#### ESM hybrid<sup>v</sup>

- Use of rugged lithium iron phosphate batteries (LiFePO4)
- Flexible power input: via PGMs, the grid, solar panels, and other technologies

developed by VINCORION that enables operation tailored to the respective load profile. This results in significant savings in fuel, emissions, and personnel compared to conventional military diesel generators.

#### PGM low emissions<sup>v</sup>

#### Technical Specifications\*

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Rated power:	20 kW, 50 kW, 200 kW
Voltage:	230 / 400 V AC
Frequency:	50 Hz
Speed::	1,500 rpm
Noise level:	≤ 61dB(A) @7m in Stage V operation
Weight (with equipment):	≤ 1.75t (20kW), ≤ 3.5t (50kW), ≤ 12.5t (200kW)
Operating temperature:	-32 °C to +55 °C
Dimensions:	2,438 x 1,457 x 1,500 mm (20 kW), 2,991 x 2,438 x 1,800 mm (50 kW), 1C-Container (200 kW)
Motor:	Stage V conformity
NSN:	PGM 50 kW: 6115124197804 PGM 200 kW: 6115124197783

## ESM hybrid<sup>v</sup>

Technical Specifications*	
Power density:	20 kW, 50 kW, 200 kW
Voltage:	230 / 400 V AC
Frequency:	50 Hz
Weight (with equipment):	≤ 1.75t (20 kW), ≤ 3.5t (50 kW), ≤ 12.5t (200 kW)
Operating temperature:	-32°C to +55°C
Dimensions:	2,438 x 1,457 x 1,500 mm (20 kW), 2,991 x 2,438 x 1,800 mm (50 kW), 1C-Container (200 kW)
Battery:	LiFePO4
NSN:	ESM 50 kW: 6130124198054 ESM 200 kW: 6130124198056

\*Design variations and additional options available on request.



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