

# OHM-TURBINE

## GAS TURBINE GENERATOR AC

### SYSTEM DESCRIPTION

The gas turbine generator represents a revolutionary innovation in mobile power supply systems. Equipped with an intake silencer and high-current batteries, it delivers an output voltage of 400V AC and a continuous output power of 7000W. An optional exhaust silencer is available.

Fuel options include diesel, petroleum, or kerosene (Jet A1). Consumption is approximately 10 liters per hour.

Ultra-compact design with high specific power; total weight is about 31 kg (approx. 35 kg with optional exhaust silencer).

### FEATURES

- Output voltage: 400V AC
- Continuous output power: 7000W
- Immediate power delivery, no warm-up phase required
- Easy start and stop
- High power density
- Lightweight
- Easy transport, even in rough terrain

### APPLICATION AREAS

- Defense and disaster relief
- Ground Power Unit (GPU) for aviation
- Mobile power supply on construction sites
- Mobile power supply for emergency services



Pure  
Sinewave



High  
frequency  
technology



Light weight,  
compact size



Full electronic  
protection



Extended  
temperature  
range

# TECHNICAL DATA

## GENERAL SPECIFICATIONS

⊕ TBO (time between overhauls)	100 h (depending on ambient temperature)
⊕ Dimensions (L x W x H)	580x360x420mm (without silencer)
⊕ Weight with silencer	31 kg
⊕ Noise level	69.4 dB at 10 m distance (with optional silencer)

## GAS TURBINE SPECIFICATIONS

⊕ Housing	chrome-nickel steel
⊕ Gearbox	integrated, maintenance-free, metal construction
⊕ Rated speed	100.000 rpm
⊕ Turbine rated power	14 PS/10.6kW (ISA standard atmosphere)
⊕ Gear output speed	20.000 rpm (5:1 ratio)
⊕ Turbine wheel	CNC-manufactured Inconel superalloy
⊕ Lubrication	light version- mix lubrication
⊕ Fuel	Jet Fuel A1 and diesel – direct start
⊕ Lubrication consumption	170 ml/min
⊕ Operation	Fully automatic operation, integrated starter

## ELECTRICAL SPECIFICATIONS

⊕ Nominal output voltage	400 V AC, 3-phase	⊕ Power factor	+/-0,75 cosφ
⊕ Voltage tolerance (no load)	+/- 1%	⊕ Storage temperature	-40...85°C
⊕ Frequency	50Hz	⊕ Operating temperature	-40...85°C
⊕ Frequency tolerance	+/- 0,2Hz	⊕ Power derating (P <sub>o</sub> /temperature)	-2.5% per °C from 50 °C to 70 °C
⊕ Harmonic distortion	<3%	⊕ Cooling	external forced ventilation
⊕ High-frequency ripple	<=12Veff	⊕ Relative humidity	5...90% (non-condensing)
⊕ Minimum output current	0A-	⊕ RoHS compliance	2002/95/EC
⊕ Continuous current (I <sub>o</sub> )	12A	⊕ Emmission	EN61000-6-4
⊕ Peak current (I <sub>o,pk</sub> )	16A	⊕ Immunity	EN61000-6-2
⊕ Maximum peak current (I <sub>pk</sub> )	23A	⊕ Safety	EN60950 Class 1
⊕ Short-circuit duration until shutdown*	2s	⊕ Dielectric strength Input/Output	not isolated
⊕ Sequential short-circuit count until shutdown	5	⊕ Dielectric strength Input/Ground	1500V AC
⊕ Load regulation (Vin 316-380 V DC)	<=4%	⊕ Dielectric strength Output/Ground	1500V AC
⊕ Load regulation (Vin 240-316 V DC)	<=25%	⊕ Dielectric strength signal Input/Output	1500V AC
⊕ Total output power (P <sub>o</sub> )	7000W	⊕ Protection	overload, short-circuit, over-temperature
⊕ Total peak power	9000VA		

\*Short-circuit condition: output voltage < 140 V AC

