

12kW MICRO TURBINE GENSET

COST EFFECTIVE RELIABLE CLEAN QUIET TOWER POWER



CLEAN POWER. TODAY.

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Providing reliable and cost effective power is a key requirement for delivering high quality telecommunications services. Over a third of the world's 4.5 million telecom towers are off grid or connected to unreliable grids.

The Bladon Micro Turbine Genset (MTG) delivers a simple, reliable and practical source of power

without the high operating costs, noise and pollutants you get with a diesel genset.

The MTG actively lowers monthly operating expenses and total cost of ownership compared to traditional diesel gensets, hybrid diesel gensets or fuel cells especially for off grid and bad grid site applications.

OPEX 50% LOWERS OPERATING COSTS



ONCE A YEAR SERVICING, REGARDLESS OF RUN HOURS

- Reduce site service visits by up to 90%
- Zero maintenance, sealed for life power unit
- No liquid coolant or oils, no overhauls, no oil disposal required



FUEL FLEXIBLE

• The MTG can run on diesel, kerosene, paraffins or any blend of these in any ratio thus giving security of supply, and access to cheaper while also deterring fuel theft



CLEANER, QUIETER

- EU Stage V emissions equivalent
- Less than 60dB(A) @ 7m

INNOVATIVE MICROTURBINE ENGINE AND AIR BEARING TECHNOLOGIES DELIVERS 12kW OF RELIABLE POWER.



UNIQUE APPROACH TO LOWERING TOTAL COST OF OWNERSHIP

- Reduced site maintenance visits by up to 90%
- Reduce fuel costs using cheaper kerosene or approved paraffins

- Blended fuel to mitigate fuel and asset theft
- Has zero engine oil/liquid coolant and therefore zero liquid disposal costs

Compared to diesel genset or hybrid genset configurations the Bladon Micro Turbine Genset can reduce Total Cost of Ownership especially for sites that are off grid or connected to bad grid.





Example: Using real data from South African off grid sites with 6kW average load reduced TCO by 20% compared to regular diesel genset

Example: Using actual data (South Africa) – off grid site with 6kW average site load – reduced TCO by 20% compared to hybrid genset configuration

CLEANER AND QUIETER

The Bladon Micro Turbine Genset bridges the gap between adoption of 100% renewable energy solutions with traditional diesel gensets. The MTG delivers all the reliability and practicality of a diesel genset but with significantly lower emissions, noise and no engine oil or disposal costs. The MTG is EU Stage V equivalent and produces significantly less emissions than the new legislative requirements.

The Bladon Micro Turbine generates a sound that is very quiet and unique; making less than 60dB(A) at 7m. No other generator sounds like this one because of its high frequency turbine noise which dissipates rapidly with distance



REMOTE MANAGEMENT AND CONTROL AS STANDARD

Eliminate unnecessary site visits through real time monitoring tools from DeepSea Electronics. The DSE7320 MKII™ controller and DSE890 Gateway™ remote manager are standard in the MTG.



BLADON MTG SPECIFICATION

KEY DATA		
Engine	Variable Speed Micro Turbine	
Application	Telecom tower power, off grid, bad grid or standby	
Fuel	Diesel or kerosene, or a blend of both, and Bladon approved paraffins	
Power	12kW (max continuous)	
Voltage	230v AC single phase, 50Hz	
Earthing	IEC 60364 TN-S	
Certification	2006/42/EC Machinery Directive, CE marked	
Handling	Standard forklift truck, sling points for easy crane handling	
ENVIRONMENTAL		
Emissions	EU Stage V equivalent No liquid coolant, engine oil, grease, or lubricant needed	
Noise	Less than 60dB(A) @ 7m	
DIMENSIONS		STANDARD FEATURES
Length	2100 mm	DeepSea DSE7320 MkII controller
Width	1010 mm	GSM and 3G/4G aerial with a GPS receiver
Height	1400 mm	DeepSea DSE890 communication gateway for remote monitoring
Weight	920 kg	(provision for alternative communication gateways)

OPTIONAL EQUIPMENT

Automatic Transfer Switch (ATS)

SERVICE & WARRANTY

Service: Single person service in less than one hour, One in-situ service every 12 months Warranty: 2 years or 8,760 run hours

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**Actual service life subject to air and fuel quality

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