



**BLADON 12KW MICRO
TURBINE GENSET**

TECHNICAL SPECIFICATION

**POWER.
TRANSFORMED.**



The Bladon Micro Turbine genset is no ordinary genset. It shares some characteristics with conventional diesel gensets but it has some unique specifications and features that separates its performance, reliability and its overall total cost of ownership.



UP TO 8,000 HOUR SERVICE INTERVALS

- Up to 90% fewer site visits
- Once a year service
- Zero maintenance, sealed for life power unit
- Minimal replacement parts simple, low cost servicing



FUEL FLEXIBILITY

- Use diesel or kerosene, or any blend of the two
- Lowers fuel costs
- Deter fuel theft through mixing



SECURE BY DESIGN

- Hardened steel cabinet
- Tamper proof internal hinges
- Door lock Smartlock compatible
- Does not use conventional diesel genset parts



REDUCED ENVIRONMENTAL IMPACT

- Stage V emissions compliant genset (12kW)
- Low noise of <65dB
- Ultra low vibration

BLADON 12KW MTG - TECHNICAL SPECIFICATIONS

	POWER		VOLTAGE	FREQUENCY
Nominal Power*	12kW		230 V single phase	50 Hz / 60Hz
Power Quality**	Pure Sine wave inverter power output with power factor -1.0, designed to operate with telecom rectifiers			
Load %	25%	50%	75%	100%
Fuel Consumption (l/h)	2.1	3.0	3.8	4.9
Installation	Indoor or Outdoor locations On grid or Off grid remote operation			
Key Features	Maintenance free power unit, sealed for life Variable speed microturbine Long Service Intervals up to 8,000 hours Low cost Service Low Cost fuel options e.g. kerosene Low Noise and Vibration Stage V Compliant 12kW diesel genset			

MICROTURBINE GENERATOR FEATURE SET

MTG Dimensions	2.1m(L) x 0.9m (W) x 1.1m(H) Excluding fuel tank and exhaust flue
Weight	< 700 kg Excluding fuel tank and batteries
Ambient Operating conditions	Temperatures: -10°C to +45°C Altitude: Up to 2000m with derating Solar irradiation: Up to 1000W/m ² Rain: Up to 150mm/hour

MINIMAL SERVICE COSTS

Service Interval*	Up to 8000 operating hours
Service Time*	2 hour average service time with minimal service parts



CONTROLLERS & MONITORING

Genset Controller	Deepsea DSE 7320 MKII II (with DSE 890 gateway option)
Genset Communications	Optional Deepsea DSE 890 gateway

Bladon have included the market leading genset controller from DeepSea Electronics to bring easy to use and powerful remote monitoring, management and control capabilities to the MTG. Using the DSE7320 MKII controller and optional DSE890 Gateway the MTG can be managed remotely further eliminating site visits.

For back-up applications optional mechanical Automatic Transfer Switch (ATS) internal to the MTG can be installed.



MTG CANOPY FEATURES

Enclosure/Canopy Features	Tamper proof hinges High Security multipoint locks and door alarm Panels anti corrosion coated and painted Designed for service and easy component replacement and shallow access IP54 where required Deepsea controller behind service door
Paint Options	External sun and weatherproof RAL9018, RAL7035 Other options available on request
Lifting	Fork lift/Sling Lift

The Bladon MTG is secure by design with a fully hardened steel cabinet, single service door access, tamper proof internal hinges, hidden battery compartment, padlock hood which can take up to 12mm size padlocks or smartlocks.



FUEL TYPES

Liquid Fuels	Diesel EN590:2009 Kerosene K1 grade Diesel Kerosene Mix Biodiesel on request Paraffin on request
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MTG ENGINE/ALTERNATOR	
Power Unit	Variable speed microturbine. Combustion driven; maintenance free
Generator Type	Synchronous generator to inverter
Internal Battery/Starting Battery	70 Ah , 48V
Alternator Insulation	Class H
Heat Recovery	High efficiency recuperator (Heat Exchanger)
Exhaust Gas Temperature	Typical maximum 280°C at full load
Exhaust Emissions	EU Regulation Stage V
Noise & Vibration	Ultra-quiet operation as standard Low measured noise of 65dB Low vibration
Earthing	Ground connection point for electrical installation
Certification	ISO 19372:2015, CE Marked with TUV independent certification and type test
Warranty	2 years or 5,000 running hours whichever comes first

OPTIONAL FEATURES	
Automatic Transfer Switch (ATS)	Mechanical ATS with DSE7320 MKII
Geo Tagging/ Geo Fencing	Configurable with DSE 890

ABOUT BLADON

Bladon is a pioneer in the design, development and manufacture of Micro Turbine Gensets.

Bladon is the world's first manufacturer of microturbine gensets for the telecom market. The company has developed revolutionary patented microturbine, heat exchanger and air bearing technologies to deliver cost effective reliable power.

BLADONMT.COM

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**8,000 hours service life subject to suitable air and fuel quality.

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Bladon Approved Reseller