

DC Generator Specification

MTGA 5KVA Diesel DC Generator

The MTGA 5KVA DC genset is powered by Kubota 2-cylinder engine and Mecc-Alte permanent magnet generator, providing reliable backup power in hybrid systems. The permanent magnet generator enables current-limited variable voltage output, which is essential for charging batteries. The charging profile is programmable to suit different battery banks. A 120L self-bundled fuel tank is located underneath the generator for a reduced footprint.

The SICES HS315 controller monitors and regulates engine speed, output voltage, output current and charging time, ensuring efficient and fast charging. The controller is configured with an auto-start feature, which automatically starts when the battery charge is low. It is also Modbus compatible and can be remotely monitored and controlled via Modbus TCP or RS232/485. The controller can be powered either from starter battery or remote supply, reducing the chance of drained starter battery.

The generator comes in 24V or 48V version for different applications. Both the 24V and 48V version has a maximum output power of 5kW. The generator is inside a powder-coated mild steel enclosure, with an accessible hatch for maintenance purposes. The engine oil drain plug is conveniently located outside the enclosure, which simplifies service procedures.

Specifications	
Weight (Empty tank)	291kg
Dimension	965x735x1060mm (HxWxL)
Engine	Kubota 2-cylinder 4-stroke diesel water-cooled
Generator	Mecc-Alte variable speed DC generator
Controller	SICES HS315
Colour	Blue (other colours are available on request)
Starter Battery Voltage	12V
Output Voltage	14-28V (24V version) 48-56V (48V version)
Battery Charging Algorithm	Three stages (bulk-absorption-float)
Engine Speed Range	1500-2500RPM
Safety Features	Starter battery isolator Emergency stop Engine over-speed protection Coolant temperature protection

