



Redefining Battlefield Power

Diesel Driven Hybrid Power & Charging Solutions

CMCA Integrated Systems' 28V DC 2kW Military Packaged Hybrid Generator is an innovative power and charging system which challenges the operational and logistical limitations of traditional diesel generators in the modern battlefield with a single aim;

Save lives by reducing the logistical support required to maintain frontline power and reduce cost by improving overall system efficiency and harnessing potential energy through an intelligent hybrid network to improve front line capability and effectiveness.

Succeeding four previous generations of compact, battle proven power systems from CMCA's power division, the MPHG-002 was designed to a exhausting set of requirements with a compact, vehicle specific space envelope and a broad environmental operating window from -33°C to $+63^{\circ}\text{C}$. Requiring a low acoustic profile to challenge that of legacy petrol charging systems and stringent EMC attenuation to Defence Standard 59 411 Land Class A, whilst maintaining man portability and not compromising rapid deployment of front line equipment.

Housed within a rugged sound and EMC attenuating enclosure with forced cooling axial fans to maximise airflow to improve efficiency and effectiveness at high ambient, the MPHG-002 provides a low operating signature for tactical deployment. Offering both manual recoil and electric start with integrated 24V starting batteries to simplify operating procedures, all controlled via an intelligent control system with a ruggedised

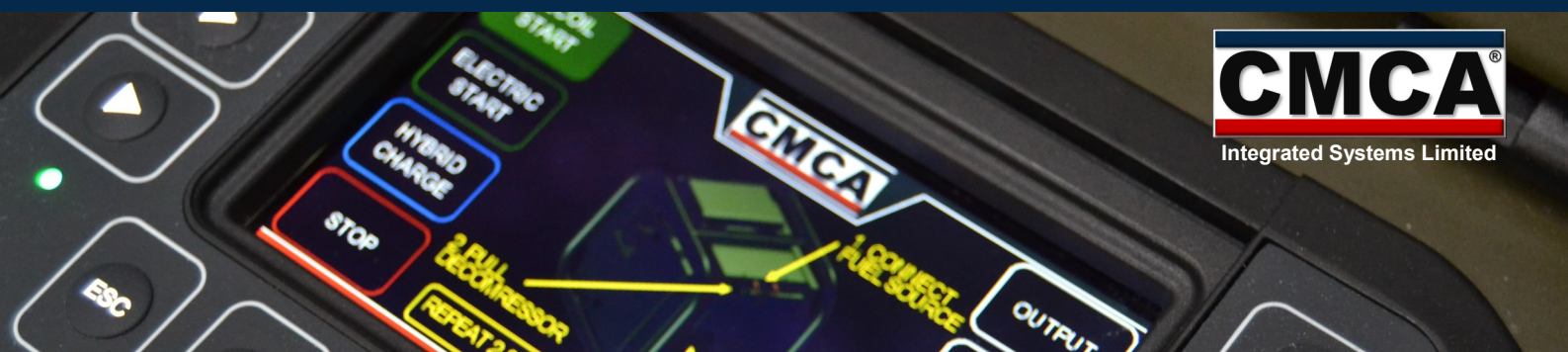


digital display interface offering feedback and instruction to simplify user interaction and support from a front line position, as well as remote HUMS capability inline with Defence Standard 23-013. The 24V electric start function not only simplifies operator interaction but also facilitates the hybrid charging capability with auto start/stop operation when connected to an external energy storage unit with embedded battery monitoring as well as additional power sources such as solar and wind, to maximum fuel efficiency, longevity and provide tactical, silent power.



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MPHG-002 Technical Specification

Output:	28V DC 70A
Output Protection:	70A manual reset circuit breaker
Power Interface:	1 x 28V 2 pole socket 1 x 28V 18 pole socket (Trickle charging output)
Fuel:	Diesel (Military Fuels)*
Fuel Capacity:	External Fuel Source 'Jerry' can interface available.
Engine Specification:	Tier V, Single Cylinder, air cooled, auto variable speed, recoil start & electric start
Starting Method:	Manual recoil pull start Manual electric start with integrated starting batteries Auto electric start/stop from battery sensing Auto electric start/stop from external command
EMC:	CE or Def Stan 59 411 Land Class A
Weight:	50kg
Length:	470mm
Width:	370mm
Height:	450mm
HUMS Interface:	Remote panel Network link via Ethernet, Modbus TCP, CAN J1939
Operating Range:	-15°C to +63°C -33°C to +63°C with arctic pre heat pack

Single Side Maintenance

Remote HUMS Interface

28V Charging Socket

Fuel Connectors

Recoil Start

470mm

370mm

450mm

28V Power
Socket &
Circuit
Breaker