

MOBILE GENERATION MG200

Introducing CoolTech's in-chassis, integrated Mobile Generation (MG) system.



Before



Mobile Generation

CoolTech's MG200 system uses the truck's engine to power a generator installed in the chassis. This provides a huge 8,400-lb weight savings compared to a tow behind generator with a similar output. Eliminating the tow-behind improves gas mileage by up to 50%. Plus, the truck can tow other equipment.

The MG200's proprietary gearing system retrofits onto new or existing trucks. No permanent modifications are necessary, so the system can be un-installed, returning the truck to its unmodified condition and, if needed, back into the lease pool.

Applicable Trucks

The MG200 kit can retrofit certain Class 6 and Class 7 trucks. Contact CoolTech to verify vehicle applicability.



Technical features

(common to all MG models):

- Generator type: brushless alternator, synchronous salient 4-pole
- Insulation: Class H
- Stator: 12-wire, 2/3 pitch (low third harmonic)
- Generator excitation is provided through the digital voltage regulator by both voltage and current source windings. This dual-source excitation system helps the generator recover voltage during applications of large loads as additional excitation is provided from the current source winding.
- Voltage selection: via the 3-position rotary switch
 - 3-phase voltages: 208, 220, 240, 416, 440, 480
 - 1-phase voltage: 120, 139, 208, 220, 240, 277

- Voltage regulation: ± 0.5%
- Current transformer protection
- Digitally adjustable voltage
- Circuit breakers for single-phase receptacles
- Single-phase receptacles are powered during all main voltage configurations.
- Total harmonic distortion: < 5%
- Power factor: 0.8
- Generator powered by vehicle's transmission. For low loads, it can run at low speeds, not at 1,800 rpm.
- Full-feature generator panel, just like a towbehind. However, the MG has a superior user interface: a touchscreen control panel (HMI).

MG SYSTEM SPECIFICATIONS

Model	MG200
Output:	
3-Phase: Standby (kVA/kW) — 60 Hz	197 /158
3-Phase: Prime (kVA/kW) — 60 Hz	188 / 150
1-Phase: Standby (kVA/kW) — 60 Hz	100 / 80
1-Phase: Prime (kVA/kW) — 60 Hz	95/76
Size and Weight:	
Weight (lb)	1,600
Fuel Consumption and Run Time:	
Fuel Consumption (gph) — @ Standby	15.8
Total Fuel Capacity (gallons)	300
Approximate Run Time @ Standby	19.0
AC Distribution	
Main Breaker Rating (Amp)	600

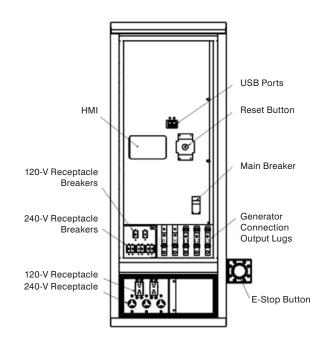


Control System

- Fully integrated control system with a 32-bit microprocessor.
- Integration with vehicle via the CAN bus.
- The digital voltage regulator interfaces with the vehicle CAN bus to provide in-cab and optional panel door control of generator and vehicle operations.
- Vehicle operations displayed include engine speed, engine temperature and transmission status.
- Generator operations displayed include line voltage, phase current, real power, reactive power and load power factor.

Generator Panel

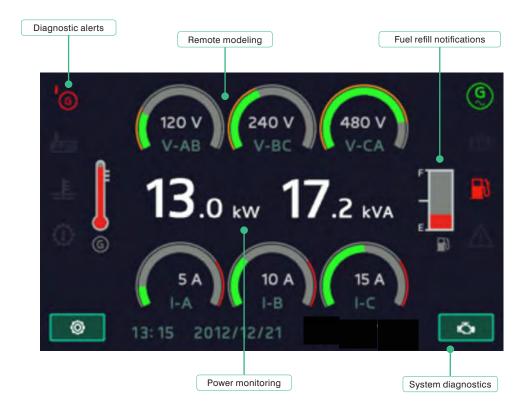
- Control panel features include the touchscreen display (HMI), USB port, system reset button and main breaker.
- Users are protected from exposure to high voltage by a nonconductive, front safety panel. The panel door is lockable and interlocked to prevent entry when the system is energized.
- Generator output lugs included to connect heavy duty cables. A separate compartment is provided for standard 120 and 240 VAC NEMA receptacles. Enables quick connection of cables and tools.



USER INTERFACE



- 7-inch color displays with intuitive touchscreen interface (one in cab and optional one in the generator panel)
- Displays both generator and vehicle information
- CAN bus communication controls voltage regulator settings and 3-position rotary switch
- User can control the system from the cab
- Multi-level password protection ensures operation by authorized users
- Integrated safety checks to prevent unsafe operation
- User-adjustable brightness settings for day or nighttime operation
- Rugged IP-67 enclosures
- Updatable Firmware



Telematics — Remote Control and Monitoring

- Fleet management
- Vehicle tracking
- System diagnostics with push alerts to any computer and mobile device
- Remote monitoring via the same user interface implemented on the onboard display
- Fuel management (monitoring fuel consumption and refill schedule)
- Automated refill notifications

- Motor pool/daily rental
- Energy metering for accurate billing/cost monitoring
- Maintenance scheduling and tracking
- Automated maintenance notifications
- Data logging and analysis for fleet use optimization
- Geofencing
- Remote system disable to prevent unauthorized use
- Recover stolen vehicles



Find out more.

CoolTech has a better answer in mobile power. A gamechanging answer. Contact us today for more information.

ENERGY EFFICIENT. MARKET DRIVEN.

