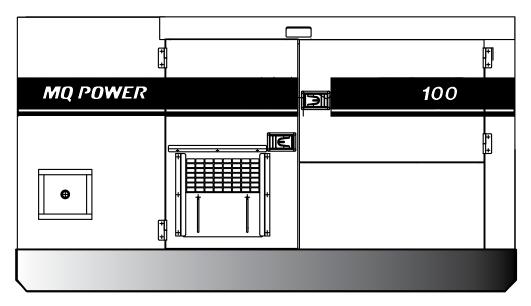
# WhisperWatt™ 100

Prime Rating — 80 kW (100 kVA)

Standby Rating — 88 kW (110 kVA)

3-Phase, 60 Hertz, 0.8 PF



#### STANDARD FEATURES

- Heavy duty, in-line 4-cycle, naturally aspirated, natural gas/ liquid propane engine provides maximum reliability.
- EPA/CARB emission certified.
- Microprocessor engine control system maintains frequency to ±0.25%
- Full load acceptance of standby nameplate rating in a single step.
- Multi-stage, water-coalescing filter, to remove solids and liquids from the gas supply, providing enhanced operation with reduced operating and maintenance costs.
- Sound attenuated, weather resistant, steel housing provides operation at 68 dB(A) at 23 feet. Fully lockable enclosure allows safe unattended operation.
- E-coat primer and powder coat paint provides durability and weather protection.
- Brushless alternator reduces service and maintenance requirements and meets temperature rise standards for Class F insulation systems.
  - Open delta alternator design provides virtually unlimited excitation for maximum motor starting capability.
  - Automatic voltage regulator (AVR) provides precise regulation.

- Basler DGC2020ES microprocessor-based digital generator controller.
  - High visibility backlit LCD display.
  - Operational temperature range of -40° to 70° C (-40° to 158° F).
  - Remote 2-wire start/stop control.
  - Metered power output parameters include:
    - Voltage
- Amperage
- Kilowatts

- Kilovolt amps
- Power Factor
- Hertz
- Modbus interface for expansion options.
- Engine monitoring data over J1939. Modbus over RS485 for SCADA Interface.
- Battery Disconnect Switch.
- Emergency stop switch when manually activated, shuts down generator in the event of an emergency.



# **SPECIFICATIONS**

Generator Specifications		
Design	Revolving field, self-ventilated Drip-proof, single bearing	
Armature Connection	Star with Neutral	Zig Zag
Phase	3	Single
Standby Output	88 KW (110 KVA)	63 KW
Prime Output	80 KW (100 KVA)	58 KW
3Ø Voltage (L-L/L-N) Voltage Selector Switch at 3Ø 240/139	208Y/120, 220Y/127, 240Y/139	N/A
3Ø Voltage (L-L/L-N) Voltage Selector Switch at 3Ø 480/277	416Y/240, 440Y/254, 480Y/277	N/A
1Ø Voltage (L-L/L-N) (Voltage Selector Switch at 1Ø 240/120)	N/A	240/120
Power Factor	0.8	1.0
Voltage Regulation (No load to full load)	±0.5%	6
Generator RPM	1800	)
Frequency	60 H:	Z
No. of Poles	4	
Winding Pitch	2/3	
Excitation	Brushless with AVR	
Frequency Regulation: No Load to Full Load	Isochronous under varying loads from no load to 100% rated load	
Frequency Regulation: Steady State	±0.25% of mean value for constant loads from no load to full load.	
Insulation	Class F	
Sound Level dB(A) Full load at 23 feet	68	

Engine Specifications	
Make / Model	PSI HD / NGE 8.8 NA
Emissions	EPA Certified
Starting System	12 VDC Electric Starter Motor
Design	4-cycle, water cooled, naturally aspirated
Displacement	537 in <sup>3</sup> (8.8 liters)
No. cylinders	8
Bore x Stroke	4.35 x 4.5 in. (110.5 x 114.3 mm)
Gross Engine Power Standby Rating (Flywheel)	
Natural Gas	146 hp (109 kW)
LP Gas	166 hp (124 kW)
Gross Engine Power Prime F	lating (Flywheel)
Natural Gas	162 hp (121 kW)
LP Gas	185 hp (138 kW)
BMEP Prime Power Rating (Natural Gas)	119 psi (820 kPA)
Piston Speed	1358 Ft/min (6.9 m/s)
Compression Ratio	10.1:1
Engine Speed	1800 rpm
Overspeed Limit	2070 rpm
Oil Capacity (w/ filter)	3.1 gallons (11.8 liters)
Battery Voltage	12VDC/Group 27 x 800CCA x 1
Battery Charging Alternator	70 Amps

Fuel System		
Recommended Fuel	Low-pressure, dry-proce approved oilfield well-h	essed natural gas; nead natural gas
Minimum Nat-Gas Supply Pipe Size	1 1/4 in N	IPT
Maximum Operating Pressure to EPR	11 in/H <sub>2</sub> O (2.	7 kPA)
Minimum Operating Pressure to EPR	7 in/H <sub>2</sub> O (1.7	7 kPA)
NG Inlet Pressure	15 - 40 F	PSI
Fuel Consumption (Natural Gas)	ft³/hr	m³/hr
At full load	818	23.16
At 3/4 load	649	18.38
At 1/2 load	497	14.07
At 1/4 load	348	9.85

Cooling System	
Fan Load	11.0 hp (8.2 kW)
Coolant Capacity (with radiator)	6.34 gallons (24 liters)
Coolant Flow Rate (per minute)	33 gallons (125 liters)
Heat Rejection to Coolant (per minute)	4184 Btu/min (4.41 MJ)
Ambient Temperature Rating	104°F (40°C)

Air	
Combustion Air	249 cfm (7.05 m³/min)
Maximum Air Cleaner Restriction	13 in. H <sub>2</sub> O (3.24 kPa)
Alternator Cooling Air	911 cfm (25.8 m³/min)

Exhaust System	
Gas Flow (full load)	804 cfm (22.8 m³/min)
Maximum Turbine Inlet Temperature	1550°F (843°C)
Maximum Allowable Back Pressure	40.8 in. H <sub>2</sub> O (10.2 kPa)

Amperage	
Rated Voltage	Maximum Amps
1Ø 120 Volt	241 Amps x 2 (Zigzag)
1Ø 240 Volt	241 Amps (Zigzag)
3Ø 208 Volt	241 Amps
3Ø 240 Volt	241 Amps
3Ø 480 Volt	120 Amps
Main Line Circuit Breaker Rating	250 Amps
Over Current Relay Trip Set Point 480V Mode Only	120 Amps

# WARRANTY\* PSI HD Engines

12 months from date of purchase with unlimited hours.

#### Generator

24 months from date of purchase or 2000 hours (whichever occurs first).

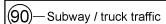
# Trailer

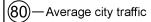
12 months excluding normal wear items.

<sup>\*</sup>Refer to the express written, one-year limited warranty sheet for additional information.

#### **MQ POWER DECIBEL LEVELS**

Our soundproof housing allows substantially lower operating noise levels than competitive designs. WhisperWatts are at home on construction sites, in residential neighborhoods, and at hospitals — just about anywhere.





70 — Inside car at 60 mph
WhisperWatt at 23 feet

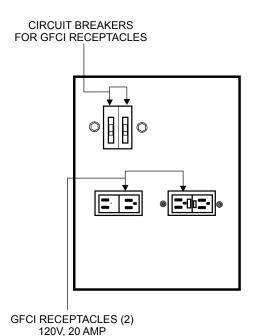
60) — Air conditioner at 20 feet

60 — Normal conversation



1

#### **GENERATOR OUTPUT PANEL**



# **OPTIONAL GENERATOR FEATURES**

- **Parallel Controls** provides the ability to connect multiple generators together into a single power generation system.
- 8-Gallon oil replenishment tank allows for extended runtimes between service intervals.
- Battery charger provides fully automatic and selfadjusting charging to the generator's battery system.
- Trailer mounted package highway legal trailer with electronic or surge brakes on all axles.

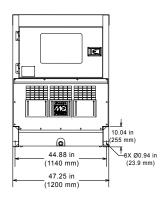
#### **OPTIONAL CONTROL FEATURES**

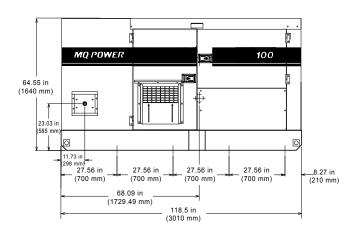
■ Audible alarm — alerts operator of abnormal conditions.

#### **OPTIONAL OUTPUT CONNECTIONS**

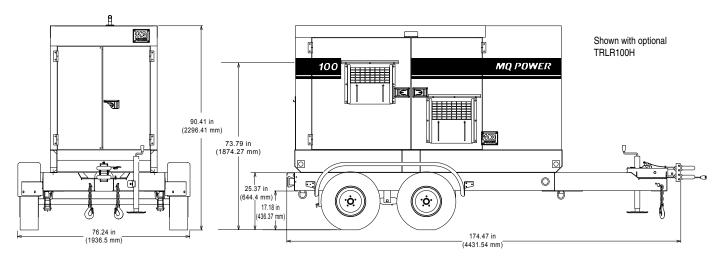
- Cam-Loks provides quick disconnect alternative to bolton connectors.
- Pin and Sleeve Connectors provides industry standard connectors for all voltage requirements.
- Output Cable available in any custom length and size configuration.

### **SKID-MOUNT DIMENSIONS**





#### TRAILER-MOUNT DIMENSIONS



NGA100SSPUL Weights	s*
Dry Weight	4,652 lbs. (2,110 kg)
Max. Lifting Point Capacity	6,960 lbs. (3,157 kg)

<sup>\*</sup>Weights do not include options.

NGA100SSPUL and TRLR100H Weights*	
Dry Weight	5,723 lbs. (2,596 kg)

Generator can be placed on MQ Trailer Model TRLR100H.

**NOTICE** 

Features and Specifications are subject to change without notice.



**MULTIQUIP** 6141 Katella Avenue Suite 200 Cypress, CA 90630 310-537-3700 E-MAIL: mq@multiquip.com