

Natural Gas & Power

On-site electric and thermal power. Xgen 100



Standby Power Rating

105kW 125kVA 60Hz

Prime Power Rating*

100kW 125kVA 60Hz

Features

- 100kW On-Site Production of Hot Water & Electricity
- Manufactured in U.S.A
- Compact design
- Connection ready
- Indoor/Outdoor installation
- 5 Year Maintenance Coverage
- Network data connection
- Runs 24/7 in parallel with the grid
- Operates with clean natural gas
- · Meets SCAQMD standards
- Sound proof within 70 decibels
- Vibration free
- Weather resistant enclosure







NFPA70, 99, 110, 37



NEC700, 701, 702, 708



ISO9001, 8528, 3046, 7637, Pluses #2b, 4



NEMA ICS10, MG1, 250, ICS6, AB1



ANSI C62.41



IBC 2009, CBC 2010, IBC 2012, ASCE 7-05, ASCE 7-10, ICC-ES AC-156 (2012)

Standard

ENGINE SYSTEM

General

- Oil Drain Extension
- Air Cleaner
- Fan Guard
- Stainless Steel Flexible Exhaust Connection
- Critical Exhaust Silencer (enclosed only)
- Factory Filled Oil
- Radiator Duct Adapter (open set only)

Cooling System

- Closed Coolant Recovery System
- UV/Ozone Resistant Hoses
- Factory-Installed Radiator
- Radiator Drain Extension
- 50/50 Ethylene Glycol Antifreeze

Fuel System

- Primary and Secondary Fuel Shutoff
- Flexible Fuel Line NPT Connection

Engine Electrical System

- Battery Charging Alternator
- **Battery Cables**
- Battery Tray
- Solenoid Activated Starter Motor
- **Rubber-Booted Engine Electrical Connections**



Natural Gas & Power On-site electric and thermal power.

Xgen 100

Standard Features ALTERNATOR SYSTEM

Alternator System

- UL2200 EGNprotect ™
- Class H Insulation Material
- 2/3 Pitch
- Skewed Stator
- **Brusless Excitation**
- **Sealed Bearings**
- **Amortisseur Winding**
- **Full Load Capacity Alternator**

Generator Set

- · Internal Genset Vibration Isolation
- Separation of Circuits high/low voltage
- Separation of Circuits multiple breakers
- Wrapped Exhaust Piping
- **Standard Factory Testing**
- 2 Year Limited Warranty (Standby Rated Units)
- 1 Year Warranty (Prime Rated Units)
- Silencer mounted in discharge hood (enclosed only)

Enclosure (If selected)

- Rust-proof fasteners with nylon washers to protect finish •
- High performance sound-absorbing material
- Gasket doors
- Stamped air-intake louvers

- Air discharge hoods for radiator-upward pointing
- Stainless steel lift off door hinges
- Stainless steel lockable handles
- Rhino Coat ™ Textured polyester powder coat

Standard Features CONTROL SYSTEM

Control Panel

- Digital H Control Panel Dual 4x20 Display •
- **Programmable Crank Limiter**
- 7-Day Programmable Exerciser
- Special Applications Programmable PLC
- RS-232/485
- All-Phase Sensing DVR
- · Full System Status
- **Utility Monitoring**
- Low Fuel Pressure Indication
- 2-Wire Start Compatible
- Power Output (kW)
- **Power Factor**
- kW Hours, Total & Last Run

- Real/Reactive/Apparent Power
- All Phase AC Voltage
- **All Phase Currents**
- Oil Pressure
- **Coolant Temperature**
- **Coolant Level**
- **Engine Speed**
- **Battery Voltage**
- Frequency
- Date/Time Fault History (log)
- Isochronous Governor Control
- Waterproof/Sealed Connectors
- Audible Alarms and Shutdowns

- Not in Auto (Flashing Light)
- Auto/Off/Manual Switch
- E-Stop (Red Mushroom-Type)
- NFPA110 Level I and II (Programmable)
- · Customizable Alarms, Warnings, and Events
- **Modbus Protocol**
- Predictive Maintenance Algorithm
- **Sealed Boards**
- Password parameter adjustment protection
- Single Point Ground
- 15 Channel Data Logging
- 0.2 Sec High Speed Data Logging
- Alarm information automatically comes up on the display

Standard Features ALTERNATOR SYSTEM

Alarms

- Oil Pressure (Pre-Programmable Low Pressure Shutdown)
- Coolant Temperature (Pre-Programmed High Temp Shutdown)
- Coolant Level (Pre-Programmed Low Temp Shutdown)
- Low Fuel Pressure Alarm
- Engine Speed (Pre-Programmed Over Speed Shutdown)
- **Battery Voltage Warning**
- Alarms & Warnings Time and Date Stated
- Alarms & Warnings for Transient and Steady **State Conditions**
- Snap shots of key operation perameters during alarms & warning
- Alarms & Warnings Spelled Out (No Alarm Codes)



Natural Gas & Power On-site electric and thermal power.

Xgen 100

Configurable Options ENGINE SYSTEM

General

- · Engine Block Heater
- Oil Heater
- Air Filter Restriction Indicator

Engine Electrical System

- 10A UL Battery Charger
- · 2.5A UL Battery Charger
- **Battery Warmer**

- Stone Guard (Open Set Only)
- · Critical Exhaust Silencer (Open Set Only/Standard on Low Emissions option)

Alternator System

- Alternator Upsizing
- **Anti-Condensation Heater**
- **Tropical Coating**
- · Permanent Magnet Excitation

Generator Set

- · Gen-Link Communications Software
- Extended Factory Testing (3 Phase Only)
- IBC Seismic Certification
- 8 Position Load Center
- 2 Year Extended Warranty
- 5 Year Warranty
- 5 Year Extended Warranty

Circuit Breaker Options

- · Main Line Circuit Breaker 2nd Main Line Circuit Breaker
- **Shunt Trip and Auxiliary Contact**
- **Electronic Trip Breakers**

Configurable Options ENCLOSURE

Enclosure

- Standard Enclosure
- · Level 1 Sound Attenuation
- Level 2 Sound Attenuation
- Steel Enclosure
- **Aluminum Enclosure**
- 150 MPH Wind Kit

- 12 VDC Enclosure Lighting Kit
- 120 VAC Enclosure Lighting Kit
- AC/DC Enclsoure Lighting Kit
- **Door Alarm Switch**
- Standard Enclosure

Control System

- · 21-Light Remote Annunciator
- Remote Relay Panel (8 or 16)
- Oil Temperature Sender with Indication Alarm
- Remote E-Stop (Break Glass-Type, Surface Mount)
- Remote E-Stop (Red Mushroom-Type, Surface Mount)
- Remote E-Stop (Break Glass-Type, Flush Mount)
- **Remote Communication-Modem**
- Remote Communication-Ethernet
- 10A Run Relay
- Ground Fault Indication & Protection Functions

Heat Exchangers

- Stainless Steel
- **Double Wall**
- **Exhaust and Radiator**



Power	Consumption	Units	Model 100
	Related Output Voltage Phase/Wires Power Factor	kW ACV	100 <u>208@60Hz</u> or <u>480@60Hz</u> 3 Phase, 3 Wire
	Tower ractor	%	Greater than 95
Input (Parasitic loads)	Consumption	Units	Model 100
	Radiator Fan Stopped Radiator Fan Operating Heater for Cold Region Voltage	kW kW kW ACV	0.31 0.64 0.82 208 or 480
Fuel	Consumption	Units	Model 100
Natural Gas	Low Heating Value High Htg Value	BTU/h Therms/h	1,110,000 11.1
Heat Recove	ery Consumption	Units	Model 100
	Low Heating Value	BTU/h	499,500
Hot Water Temp	Inlet Outlet	Deg F Deg F	180 – (MIN 150 185 - (MAX) 230
	Hot Water Flow Rate	Gal/Min	30
Efficiency	Consumption	Units	Model 100
	Overall Fuel Efficiency	%	82
	Electrical Generation Efficiency Exhaust Heat Recovery Ratio	% %	35 45
Sound Level	Consumption	Units	Model 100
	Radiator Fan Stopped Radiator Fan Operating	dB(A) dB(A)	60 (Ind) 15 (Hotel) 65 (Ind) 20 (Hotel)
Dimensions	Consumption	Units	Model 100
	Length	Inches	141.70
	Width Height	Inches Inches	46.45 66.93
	Net Weight	Pounds	5291
Notes			

- 1. OPG GO-GEN MODEL 100 SYNCHRONOUS 208/480 VOLTS, 3 PHASES UL LISTED NO. 5010038
- 2. EPA + SCAQMD EMMISSION COMPLAINT
- 3. RATED AT 120 HP, INCLUDES BASLER CONTROLLER WITH BECKWITH RELAY PROTECTION