# BLUE ST R Power Systems Inc.

Gaseous Product Line

208-600 Volt

GM100-03 60 Hz / 1800 RPM

100 kWe Standby

## Ratings

	240V	208V	240V	480V	600V
Phase	1	3	3	3	3
PF	1	0.8	0.8	0.8	0.8
Hz	60	60	60	60	60
Generator Model	UCI274F	UCI274D	UCI274D	UCI274C	UCI274D
Connection	12 LEAD DD	12 LEAD WYE	12 LEAD DELTA	12 LEAD WYE	4 LEAD WYE
kWe Nat (LP)	100 (80)	100 (80)	100 (80)	100 (80)	100 (80)
AMPS Nat (LP)	417 (333)	347 (278)	301 (241)	151 (120)	120 (96)
Temp Rise	125°C / 40°C	125°C / 40°C	125°C / 40°C	125°C / 40°C	125°C / 40°C

## Standard Equipment

#### **Engine**

- Radiator Cooled Unit Mounted (50°C)
- Radiator Duct Flange (OPU Only)
- Blower Fan & Fan Drive
- Starter & Alternator
- Oil Pump & Filter
- Oil Drain Extension w/Valve
- Governor Electronic Isochronous
- 12V Battery System & Cables
- Air Cleaner (Dry Single Stage)
- Critical Grade Silencer Mounted
- Flexible Fuel Connector
- EPA Certified

#### Generator

- Brushless Single Bearing
- Automatic Voltage Regulator
- ± 1% Voltage Regulation
- 4 Pole, Rotating Field
- 125°C Standby Temperature Rise
- $-\,$  100% of Rated Load One Step
- 5% Maximum Harmonic Content
- NEMA MG 1, IEEE and ANSI Standards Compliance for Temperature Rise

#### Additional

- Single Source Supplier
- UL 2200 & cUL Listed
- CSA Certified
- Seismic Certified to IBC 2021
- NFPA 110 / CSA C282 Compliant
- Microprocessor Based Digital Control Panel
   Mounted in NEMA 12 Enclosure
- Base Formed Steel
- Main Line Circuit Breaker Mounted & Wired
- Battery Charger 12V 6 Amp
- Jacket Water Heater -20°F 1500W 120V w/Isolation Valves
- Vibration Isolation Mounts
- 2 Year / 2000 Hour Standby Warranty
- Standard Colors White / Gray

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### 100 kWe



## Application Data

Engine					
Manufacturer:	Power Solutions International	Displacement - Cu. In. (lit):	350 (5.70)		
Model:	5.7LTCAC	Bore - in. (cm) x Stroke - in. (cm):	4.00 (10.2) x 3.48 (8.84))		
Type:	4-Cycle	Compression Ratio:	9.40:1		
Aspiration:	Turbo Charged, CAC	Rated RPM:	1800		
Cylinder Arrangement:	8 Cylinder Vee	Max HP Stby (kWm):	164 (122)		
Exhaust System			Standby		
Gas Temp. (Stack): °F (°C)			1,350 (732)		
Gas Volume at Stack Temp: CFM (m³	/min)		846 (23.9)		
Maximum Allowable Exhaust Restrict	tion: in. H <sub>2</sub> O (kPa)		40.8 (10.2)		
Cooling System					
Ambient Capacity of Radiator: °F (°C)			122 (50)		
Maximum Allowable Static Pressure	on Rad. Exhaust: in. H <sub>2</sub> O (kPa)	0.50 (0.12)			
Water Pump Flow Rate: GPM (lit/min)		40.0 (147.6)			
Heat Rejection to Coolant: BTUM (kW	/)	4,100 (71.8)			
Heat Rejection to CAC: BTUM (kW)		711 (12.4)			
Heat Radiated to Ambient: BTUM (kV	V)		2,121 (37.1)		
Air Requirements					
Aspirating: CFM (m³/min)			262 (7.41)		
Air Flow Required for Rad. Cooled Unit: CFM (m³/min)		16,500 (467)			
Air Flow Required for Heat Exchanger/Rem. Rad. CFM (m³/min)		Consult Factory Fo	Consult Factory For Remote Cooled Applications		
Fuel Consumption		Natura	al Gas LP		
At 100% of Power Rating: ft3/hr (m3/hr)		1,360	0 (38.5) 509 (14.4)		
At 75% of Power Rating: ft3/hr (m3/h	r)	1,110	0 (31.4) 411 (11.6)		
At 50% of Power Rating: ft3/hr (m3/h	r)	770	290 (8.22)		
Fuel Inlet Size: NPT			1.50"		
Fuel Pressure Required: in. H <sub>2</sub> O (kPa)			11.0 (2.75)		
Fluids Capacity					
Total Oil System: gal (lit)			1.50 (5.70)		
Engine Jacket Water Capacity: gal (lit		2.03 (7.67)			
System Coolant Capacity: gal (lit)		6.30 (23.8)			

All calculations based on natural gas fuel.

 $Deration \ Factors: \ Temperature: \ Derate \ 1.5\% \ Per \ 10\% \ Over \ 77\% \ Air \ Inlet \ Temperature: \ | \ Altitude: \ Derate \ 2.5\% \ Per \ 1,000 \ ft \ Over \ 1,200 \ ft \ Over$ 

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## Gaseous Product Line

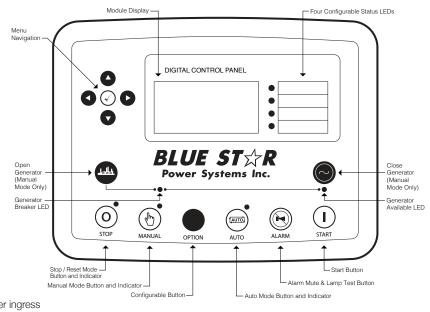
#### 100 kWe



## DCP7310 Control Panel

#### Standard Features

- Digital Metering
- Engine Parameters
- Generator Protection Functions
- Engine Protection
- CAN Bus (J1939) ECU Communications
- Windows-Based Software
- Multilingual Capability
- Remote Communications to DSE2548 Remote Annunciator
- 8 Programmable Contact Inputs
- 10 Contact Outputs
- RS485 Communicator Interface
- cULus Listed, CE Approved
- Event Recording
- IP 65 rating (with supplied gasket) offers increased resistance to water ingress
- NFPA 110 Level 1 Compatible

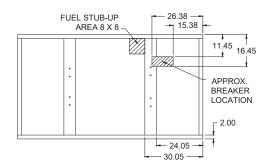


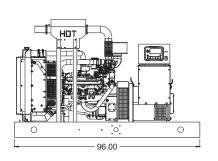
## Weights / Dimensions / Sound Data

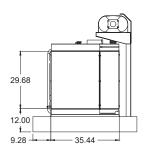
	LxWxH	Weight lbs	
OPU	96 x 54 x 62 in	2,925	
Level 1	112 x 54 x 80 in	3,775	
Level 2	112 x 54 x 80 in	3,850	
Level 3	152 x 54 x 80 in	4,075	

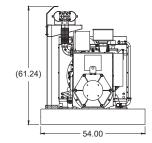
Please allow 6-12 inches for height of exhaust stack.

	No Load	Full Load
OPU	81 dBA	83 dBA
Level 1	75 dBA	78 dBA
Level 2	71 dBA	74 dBA
Level 3	67 dBA	69 dBA









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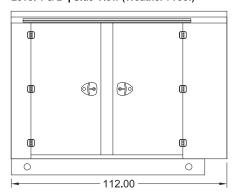
## Gaseous Product Line

#### 100 kWe

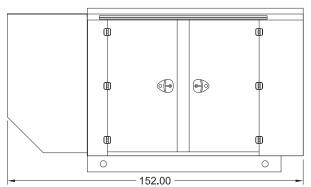


## **Enclosures**

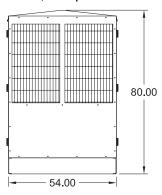
Level 1 & 2 | Side View (Weather Proof)



Level 3 | Side View (Sound Attenuated)



Level 1, 2 & 3 | Intake View



- All enclosure models are 200 MPH wind rating certified in accordance with IBC2021 and ASCE/SEI 7-16 standards.
- Level 2 & 3 enclosures include sound attenuation foam
- Level 3 enclosure includes frontal sound & exhaust hood.
- Enclosure height does not include exhaust stack.



American Owned

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- All specification sheet dimensions are represented in inches.

Notes

 All drawings based on standard 480 volt standby generator. Lengths may vary with other voltages. All drawings and dimensions subject to change without notice.

- All enclosures are based on the standard unit configuration. Any requested deviation can change dimensions.
- Sound data is measured at 23 feet (7 meters) in accordance with ISO 8528-10.
- All materials and specifications subject to change without notice.

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