# BLUE ST R Power Systems Inc.

Gaseous Product Line

208-600 Volt

NG650-01 60 Hz / 1800 RPM

650 kWe Standby

## Ratings

	208V	240V	480 <b>V</b>	600V
Phase	3	3	3	3
PF	0.8	0.8	0.8	0.8
Hz	60	60	60	60
Generator Model	S6L1D-C	S6L1D-C	HCI534F	HCI534F
Connection	12 LEAD WYE	12 LEAD DELTA	12 LEAD WYE	4 LEAD WYE
kWe Nat (LP)	650 (400)	650 (400)	650 (400)	650 (400)
AMPS Nat (LP)	2258 (1390)	1957 (1204)	978 (602)	783 (482)
Temp Rise	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
- 24V Battery System & Cables
- Air Cleaner (Dry Single Stage)
- Catalyst / Silencer Mounted
- Flexible Fuel Connector
- EPA Certified

#### Generator

- Brushless Single Bearing
- Automatic Voltage Regulator
- ± 0.50% 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 Structural Steel
- Main Line Circuit Breaker Mounted & Wired
- Battery Charger 24V 5 Amp
- Jacket Water Heater (Qty 2) -20°F 5000W 240V w/Isolation Valves
- Vibration Isolation Mounts (Pad Type)
- 2 Year / 2000 Hour Standby Warranty
- Standard Colors White / Gray

NG650-01 1 of 4

# Gaseous Product Line

### 650 kWe



32.2 (122)

29.1 (110)

54.4 (206)

## **Application Data**

Engine				
Manufacturer:	Power Solutions International	Displacement - Cu. In. (lit):		11 (31.8)
Model:	32L	Bore - in. (cm) x Stroke - in. (cm): 5.91 (15.		.91 (15.0)
Type:	4-Cycle	Compression Ratio:		10.5 : 1
Aspiration:	Turbo Charged, CAC	Rated RPM:		1800
Cylinder Arrangement:	12 Cylinder Vee	Max HP Stby (kWm):	9	966 (721)
Exhaust System			5	Standby
Gas Temp. (Stack): °F (°C)			1,	183 (639)
Gas Volume at Stack Temp: CFV	1 (m³/min)		4,	354 (123)
Maximum Allowable Exhaust Res	striction (Post Catalyst): in. H <sub>2</sub> O (kPa)		2	0.8 (5.20)
Cooling System				
Ambient Capacity of Radiator: °F	(°C)		-	122 (50.0)
Maximum Allowable Static Press	ure on Rad. Exhaust: in. H2O (kPa)		0	.50 (0.12)
Water Pump Flow Rate: GPM (lit/	/min)		36	61 (1,367)
Heat Rejection to Coolant: BTUN	1 (kW)		34,	074 (596)
Heat Rejection to CAC: BTUM (k'	W)	4,169 (73.0)		
Heat Radiated to Ambient: BTUN	1 (kW)		12,	787 (224)
Air Requirements				
Aspirating: CFM (m³/min)		1,320 (37.4)		
Air Flow Required for Rad. Coole	d Unit: CFM (m³/min)	41,200 (1,166)		
Air Flow Required for Heat Exchanger/Rem. Rad. CFM (m³/min)		Consult Factory For Remote Cooled Applications		
			Standby	
Fuel Consumption		Natura	l Gas	LP
At 100% of Power Rating: ft3/hr	(m3/hr)	7,259	9 (205) 2,	177 (61.6)
At 75% of Power Rating: ft3/hr (r	n3/hr)	5,708	3 (162) 1,6	644 (46.5)
At 50% of Power Rating: ft3/hr (r	n3/hr)	4,208	3 (119) 1,2	212 (34.3)
Fuel Inlet Size: NPT				3.00"
Fuel Pressure Required: in. H <sub>2</sub> O (	(kPa)		1	1.0 (2.75)

All calculations based on natural gas fuel.

System Coolant Capacity: gal (lit)

Engine Jacket Water Capacity: gal (lit)

Fluids Capacity

Total Oil System: gal (lit)

Deration Factors: Temperature: Derate 1.5% Per 5°F Over 77°F Air Inlet Temperature | Altitude: Derate 6% Per 1,000 ft Over 1,200 ft

Consult factory for site conditions above these parameters and/or operation on LP fuel.

NG650-01 2 of 4

# Gaseous Product Line

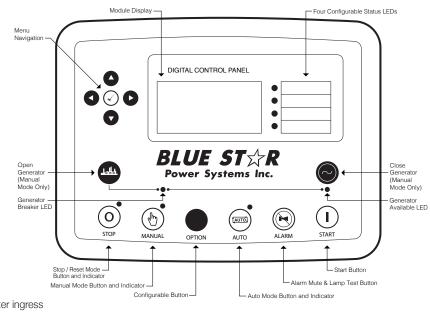
#### 650 kWe



## 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

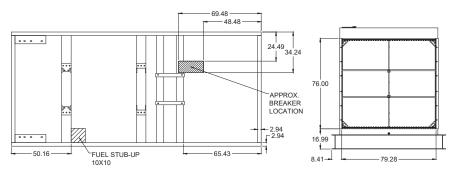


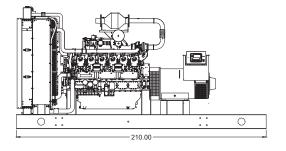
# Weights / Dimensions / Sound Data

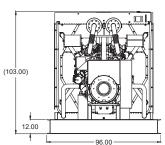
	LxWxH	Weight lbs	
OPU	210 x 96 x 103 in	16,175	
Level 1	210 x 96 x 108 in	18,075	
Level 2	210 x 96 x 108 in	18,175	
Level 3	285 x 96 x 108 in	19,175	

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

	No Load	Full Load
OPU	86 dBA	89 dBA
Level 1	84 dBA	87 dBA
Level 2	79 dBA	82 dBA
Level 3	74 dBA	77 dBA







NG650-01 3 of 4

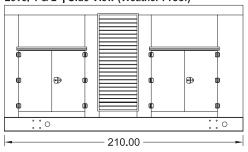
# Gaseous Product Line

#### 650 kWe

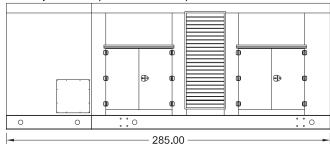


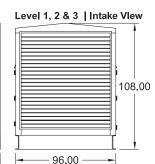
## **Enclosures**

Level 1 & 2 | Side View (Weather Proof)



Level 3 | Side View (Sound Attenuated)





- 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.

#### Notes

- All specification sheet dimensions are represented in inches.
- 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.



American Made

#### Blue Star Power Systems, Inc.

2250 Carlson Drive
North Mankato, Minnesota 56003
Phone + 1 507 345 1776
bluestarps.com
quote.bluestarps.com
sales@bluestarps.com

NG650-01 4 of 4