

# BLUE STAR

## Power Systems Inc.

### Gaseous Product Line

208-600 Volt

NG500-01

60 Hz / 1800 RPM

500 kWe

Standby

### Ratings

	208V	240V	480V	600V
Phase	3	3	3	3
PF	0.8	0.8	0.8	0.8
Hz	60	60	60	60
Generator Model	HCI534E	HCI534E	HCI534D	HCI534D
Connection	12 LEAD WYE	12 LEAD DELTA	12 LEAD WYE	4 LEAD WYE
kWe Nat (LP)	500 (400)	500 (400)	500 (400)	500 (400)
AMPS Nat (LP)	1737 (1390)	1505 (1204)	753 (602)	602 (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
- $\pm 0.50\%$  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

# Gaseous Product Line

500 kWe



## Application Data

### Engine

Manufacturer:	Power Solutions International	Displacement - Cu. In. (lit):	1941 (31.8)
Model:	32L	Bore - in. (cm) x Stroke - in. (cm):	5.91 (15.0) x 5.91 (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):	966 (721)

### Exhaust System

#### Standby

Gas Temp. (Stack): °F (°C)	1,111 (599)
Gas Volume at Stack Temp: CFM (m³/min)	3,218 (91.1)
Maximum Allowable Exhaust Restriction (Post Catalyst): in. H <sub>2</sub> O (kPa)	20.8 (5.20)

### Cooling System

Ambient Capacity of Radiator: °F (°C)	122 (50.0)
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)	361 (1,367)
Heat Rejection to Coolant: BTUM (kW)	26,768 (468)
Heat Rejection to CAC: BTUM (kW)	2,661 (46.6)
Heat Radiated to Ambient: BTUM (kW)	9,987 (175)

### Air Requirements

Aspirating: CFM (m³/min)	1012 (28.6)
Air Flow Required for Rad. Cooled 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

#### Natural Gas

#### LP

At 100% of Power Rating: ft³/hr (m³/hr)	5,878 (166)	2,177 (61.6)
At 75% of Power Rating: ft³/hr (m³/hr)	4,837 (137)	1,644 (46.5)
At 50% of Power Rating: ft³/hr (m³/hr)	3,317 (93.9)	1,212 (34.3)
Fuel Inlet Size: NPT		3.00"
Fuel Pressure Required: in. H <sub>2</sub> O (kPa)		11.0 (2.75)

### Fluids Capacity

Total Oil System: gal (lit)	32.2 (122)
Engine Jacket Water Capacity: gal (lit)	29.1 (110)
System Coolant Capacity: gal (lit)	54.4 (206)

All calculations based on natural gas fuel.

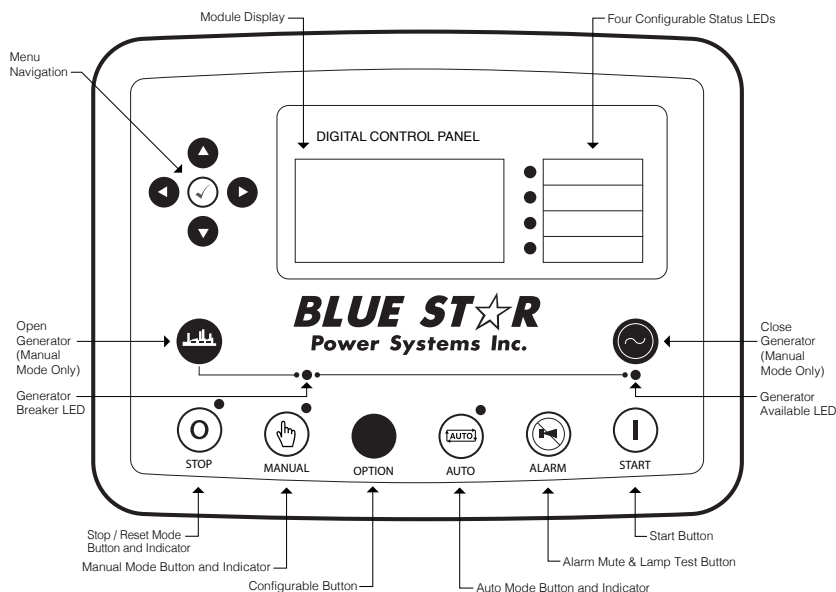
Deration Factors: Temperature: Derate 3% Per 10°F Over 97°F Air Inlet Temperature | Altitude: Derate 6% Per 1,000 ft Over 4,200 ft

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

## DCP7310 Control Panel

### Standard Features

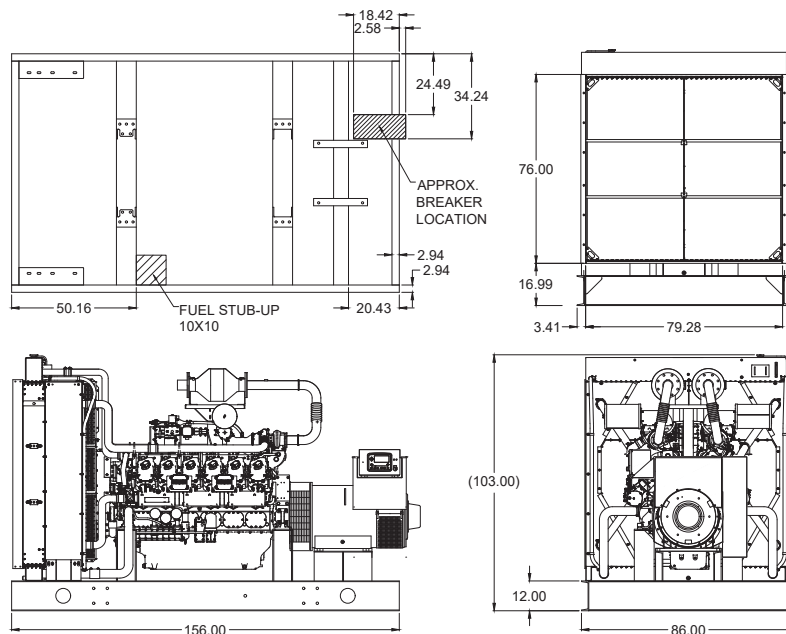
- Digital Metering
- Engine Parameters
- Generator Protection Functions
- Engine Protection
- CAN Bus (J1939) ECU Communications
- Windows-Based Software
- Multilingual Capability
- Remote Communications to DSE2548 Remote Annunciator
- 8 Programmable Contact Inputs
- 10 Contact Outputs
- RS485 Communicator 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

	L x W x H	Weight lbs
<b>OPU</b>	210 x 96 x 103 in	15,500
<b>Level 1</b>	210 x 96 x 108 in	17,400
<b>Level 2</b>	210 x 96 x 108 in	17,500
<b>Level 3</b>	285 x 96 x 108 in	18,500

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



	No Load	Full Load
<b>OPU</b>	85 dBA	88 dBA
<b>Level 1</b>	83 dBA	86 dBA
<b>Level 2</b>	78 dBA	81 dBA
<b>Level 3</b>	73 dBA	76 dBA

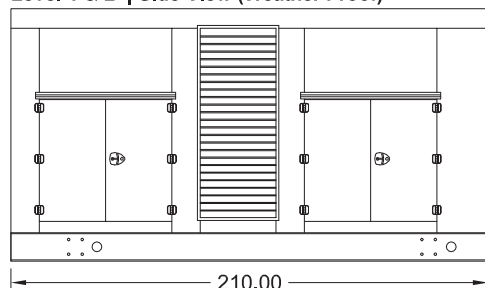
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500 kWe

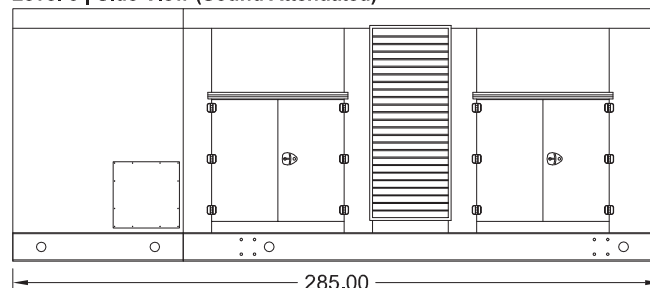
**BLUE STAR**  
Power Systems Inc.

## Enclosures

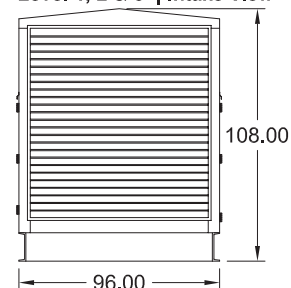
Level 1 & 2 | Side View (Weather Proof)



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.

### 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 Owned



American Made

**Blue Star Power Systems, Inc.**

2250 Carlson Drive

North Mankato, Minnesota 56003

Phone + 1 507 345 1776

[bluestarps.com](http://bluestarps.com)

[quote.bluestarps.com](mailto:quote.bluestarps.com)

[sales@bluestarps.com](mailto:sales@bluestarps.com)