

# BLUE STAR

## Power Systems Inc.

### Gaseous Product Line

208-600 Volt

NG500-02

60 Hz / 1800 RPM

500 kWe

Standby

### Ratings

	208V	240V	480V	600V
<b>Phase</b>	3	3	3	3
<b>PF</b>	0.8	0.8	0.8	0.8
<b>Hz</b>	60	60	60	60
<b>Generator Model</b>	HCI534E	HCI534E	HCI534D	UCI224D
<b>Connection</b>	12 LEAD WYE	12 LEAD DELTA	12 LEAD WYE	4 LEAD WYE
<b>kWe Nat (LP)</b>	500 (N/A)	500 (N/A)	500 (N/A)	500 (N/A)
<b>AMPS Nat (LP)</b>	1737 (N/A)	1505 (N/A)	753 (N/A)	602 (N/A)
<b>Temp Rise</b>	125°C / 40°C	125°C / 40°C	125°C / 40°C	125°C / 40°C

### Standard Equipment

- |  |   |   |
|--|---|---|
| <p><b>Engine</b></p> <ul style="list-style-type: none"> <li>- Radiator Cooled Unit Mounted (50°C)</li> <li>- Radiator Duct Flange (OPU Only)</li> <li>- Blower Fan &amp; Fan Drive</li> <li>- Starter &amp; Alternator</li> <li>- Oil Pump &amp; Filter</li> <li>- Oil Drain Extension w/Valve</li> <li>- Governor - Electronic Isochronous</li> <li>- 24V Battery System &amp; Cables</li> <li>- Air Cleaner (Dry Single Stage)</li> <li>- Catalyst / Silencer Mounted</li> <li>- Flexible Fuel Connector</li> <li>- EPA Certified</li> </ul> | <p><b>Generator</b></p> <ul style="list-style-type: none"> <li>- Brushless Single Bearing</li> <li>- Automatic Voltage Regulator</li> <li>- ± 0.50% Voltage Regulation</li> <li>- 4 Pole, Rotating Field</li> <li>- 125°C Standby Temperature Rise</li> <li>- 100% of Rated Load - One Step</li> <li>- 5% Maximum Harmonic Content</li> <li>- NEMA MG 1, IEEE and ANSI Standards Compliance for Temperature Rise</li> </ul> | <p><b>Additional</b></p> <ul style="list-style-type: none"> <li>- Single Source Supplier</li> <li>- UL 2200 &amp; cUL Listed</li> <li>- CSA Certified</li> <li>- Seismic Certified to IBC 2021</li> <li>- NFPA 110 / CSA C282 Compliant</li> <li>- Microprocessor Based Digital Control Panel Mounted in NEMA 12 Enclosure</li> <li>- Base - Structural Steel</li> <li>- Main Line Circuit Breaker Mounted &amp; Wired</li> <li>- Battery Charger 24V 5 Amp</li> <li>- Jacket Water Heater -20°F 5000W 240V w/Isolation Valves</li> <li>- Vibration Isolation Mounts (Pad Type)</li> <li>- 2 Year / 2000 Hour Standby Warranty</li> <li>- Standard Colors - White / Gray</li> </ul> |
|--|---|---|

## Application Data

### Engine

Manufacturer:	Power Solutions International	Displacement - Cu. In. (lit):	1336 (21.9)
Model:	21.9LHO	Bore - in. (cm) x Stroke - in. (cm):	5.00 (12.8) x 5.60 (14.2)
Type:	4-Cycle	Compression Ratio:	10.5 : 1
Aspiration:	Turbo Charged, CAC	Rated RPM:	1800
Cylinder Arrangement:	12 Cylinder Vee	Max HP Stby (kWm):	764 (570)

### Exhaust System

Gas Temp. (Stack): °F (°C)	1,244 (673)
Gas Volume at Stack Temp: CFM (m³/min)	3,301 (93.4)
Maximum Allowable Exhaust Restriction (Post Catalyst): in. H <sub>2</sub> O (kPa)	20.36 (5.08)

### Standby

### 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)	151 (572)
Heat Rejection to Coolant: BTUM (kW)	32,152 (563)
Heat Rejection to CAC: BTUM (kW)	4,935 (86.4)
Heat Radiated to Ambient: BTUM (kW)	9,869 (173)

### Air Requirements

Aspirating: CFM (m³/min)	917 (26.0)
Air Flow Required for Rad. Cooled Unit: CFM (m³/min)	39,995 (1,132)
Air Flow Required for Heat Exchanger/Rem. Rad. CFM (m³/min)	Consult Factory For Remote Cooled Applications

### Fuel Consumption

	Natural Gas	LP
At 100% of Power Rating: ft <sup>3</sup> /hr (m <sup>3</sup> /hr)	5,330 (151)	N/A
At 75% of Power Rating: ft <sup>3</sup> /hr (m <sup>3</sup> /hr)	4,089 (116)	N/A
At 50% of Power Rating: ft <sup>3</sup> /hr (m <sup>3</sup> /hr)	2,937 (83.1)	N/A
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)	10.6 (40.0)
Engine Jacket Water Capacity: gal (lit)	12.0 (45.4)
System Coolant Capacity: gal (lit)	51.0 (193)

All calculations based on natural gas fuel.

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

## DCP7310 Control Panel

### Standard Features

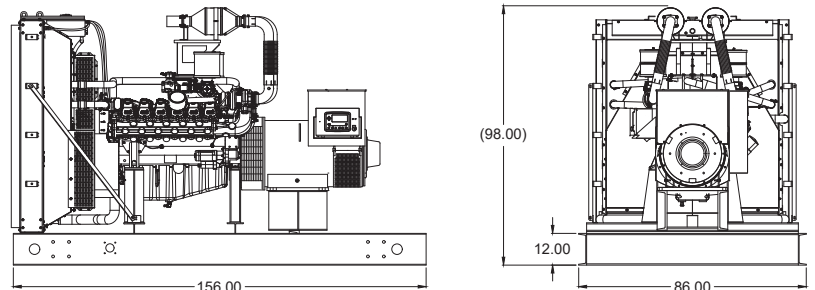
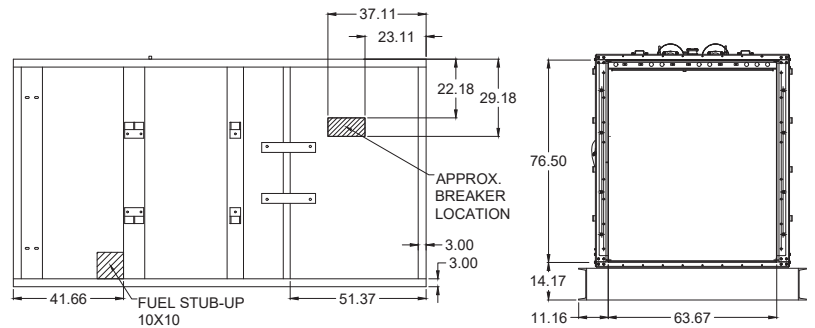
- Digital Metering
- Engine Parameters
- Generator Protection Functions
- Engine Protection
- CAN Bus (J1939) ECU Communications
- Windows-Based Software
- Multilingual Capability
- Remote Communications to DSE2548 Remote Annunciator
- 8 Programmable Contact Inputs
- 10 Contact Outputs
- RS485 Communicator 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>	156 x 86 x 98 in	11,450
<b>Level 1</b>	156 x 86 x 110 in	13,200
<b>Level 2</b>	156 x 86 x 110 in	13,300
<b>Level 3</b>	228 x 86 x 110 in	14,025

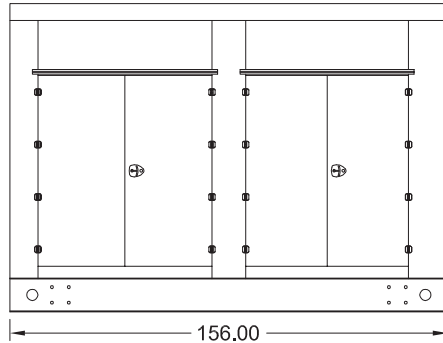
Please allow 6-12 inches for height of exhaust stack.



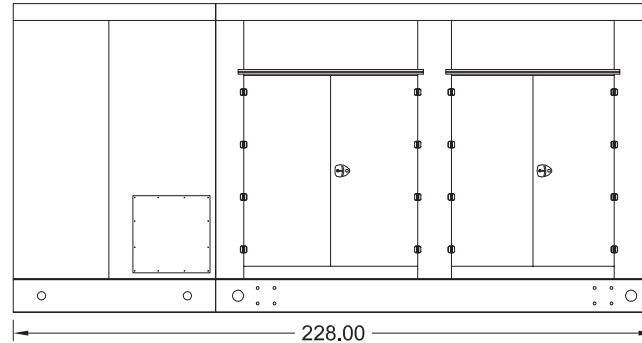
	No Load	Full Load
<b>OPU</b>	85 dBA	88 dBA
<b>Level 1</b>	82 dBA	86 dBA
<b>Level 2</b>	77 dBA	80 dBA
<b>Level 3</b>	73 dBA	75 dBA

## Enclosures

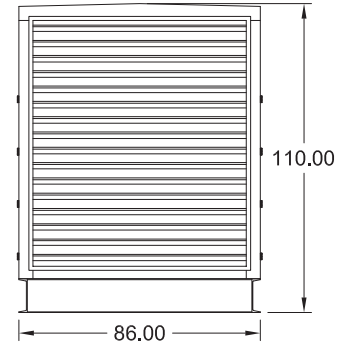
Level 1 & 2 | Side View (Weather Proof)



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

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