

# BLUE STAR

## Power Systems

Gaseous Product Line

208-600 Volt

PS40-01

60 Hz / 1800 RPM

40 kWe

Standby

### Ratings

	240V	208V	240V	480V	600V
<b>Phase</b>	1	3	3	3	3
<b>PF</b>	1	0.8	0.8	0.8	0.8
<b>Hz</b>	60	60	60	60	60
<b>Generator Model</b>	UCI224D	UCI224C	UCI224C	UCI224C	UCI224C
<b>Connection</b>	12 LEAD DD	12 LEAD WYE	12 LEAD DELTA	12 LEAD WYE	4 LEAD WYE
<b>kWe Nat (LP)</b>	40 (40)	40 (40)	40 (40)	40 (40)	40 (40)
<b>AMPS Nat (LP)</b>	167 (167)	139 (139)	120 (120)	60 (60)	48 (48)
<b>Temp Rise</b>	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

### Application Data

#### Engine

Manufacturer:	Power Solutions International	Displacement - Cu. In. (lit):	262 (4.30)
Model:	4.3L	Bore - in. (cm) x Stroke - in. (cm):	4.00 (10.2) x 3.48 (8.80)
Type:	4-Cycle	Compression Ratio:	9.80:1
Aspiration:	Natural	Rated RPM:	1800
Cylinder Arrangement:	6 Cylinder Vee	Max HP Stby (kWm):	82.2 (61.3)

#### Exhaust System

#### Standby

Gas Temp. (Stack): °F (°C)	1,350 (732)
Gas Volume at Stack Temp: CFM (m³/min)	362 (10.2)
Maximum Allowable Exhaust Restriction in. H <sub>2</sub> O (kPa)	40.8 (10.2)

#### 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)	36.6 (138)
Heat Rejection to Coolant: BTUM (kW)	2,300 (40.3)
Heat Rejection to CAC: BTUM (kW)	N/A
Heat Radiated to Ambient: BTUM (kW)	699 (12.2)

#### Air Requirements

Aspirating: CFM (m³/min)	112 (3.17)
Air Flow Required for Rad. Cooled Unit: CFM (m³/min)	5,157 (146)
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: ft <sup>3</sup> /hr (m <sup>3</sup> /hr)	628 (17.8)	251 (7.10)
At 75% of Power Rating: ft <sup>3</sup> /hr (m <sup>3</sup> /hr)	505 (14.3)	202 (5.72)
At 50% of Power Rating: ft <sup>3</sup> /hr (m <sup>3</sup> /hr)	389 (11.0)	155 (4.39)
Fuel Inlet Size: NPT		1.0"
Fuel Pressure Required: in. H <sub>2</sub> O (kPa)		11.0 (2.75)

#### Fluids Capacity

Total Oil System: gal (lit)	1.12 (4.25)
Engine Jacket Water Capacity: gal (lit)	1.93 (7.30)
System Coolant Capacity: gal (lit)	6.00 (22.7)

All calculations based on natural gas fuel.

Deration Factors: Temperature: Derate 1% Per 10°F Over 77°F Air Inlet Temperature | Altitude: Derate 3% Per 1,000 ft Over 1,200 ft

## DCP7310 Control Panel

### Standard Features

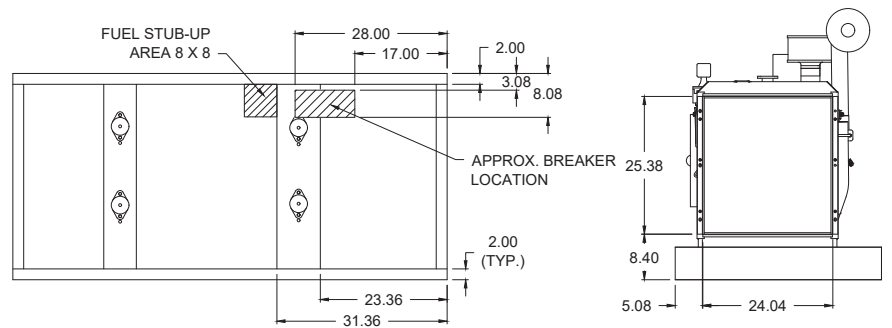
- Digital Metering
- Engine Parameters
- Generator Protection Functions
- Engine Protection
- CAN Bus (J1939) ECU Communications
- Windows-Based Software
- Multilingual Capability
- Remote Communications to DSE2548 Remote Annunciator
- 8 Programmable Contact Inputs
- 10 Contact Outputs
- RS485 Communicator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



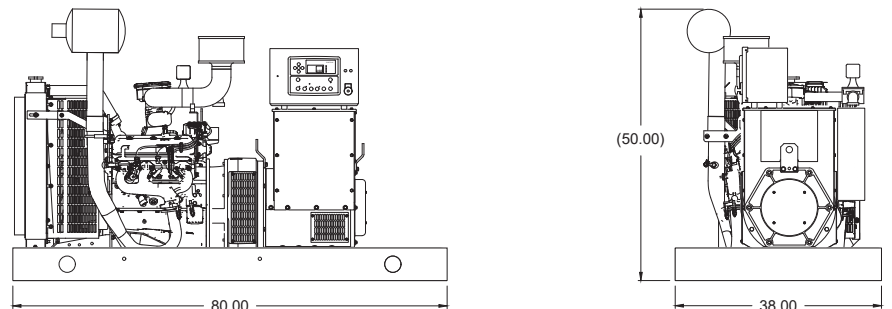
## Weights / Dimensions / Sound Data

	L x W x H	Weight lbs
<b>OPU</b>	80 x 38 x 50 in	1,575
<b>Level 1</b>	90 x 38 x 60 in	2,075
<b>Level 2</b>	90 x 38 x 60 in	2,125
<b>Level 3</b>	120 x 38 x 60 in	2,250

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

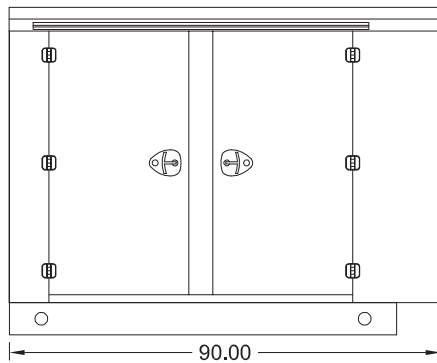


	No Load	Full Load
<b>OPU</b>	74 dBA	76 dBA
<b>Level 1</b>	68 dBA	70 dBA
<b>Level 2</b>	65 dBA	67 dBA
<b>Level 3</b>	62 dBA	63 dBA

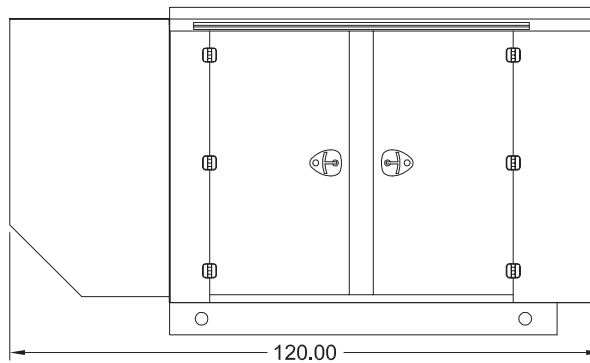


## Enclosures

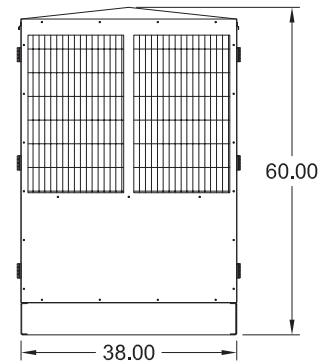
Level 1 & 2 | Side View (Weather Proof)



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.

### Blue Star Power Systems

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)

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