

# BLUE STAR

## Power Systems Inc.

Diesel Product Line

208-4160 Volt

MD2000-01

60 Hz / 1800 RPM

2000 kWe

Standby

### Ratings

	208V	240V	480V	600V	4160V
<b>Phase</b>	3	3	3	3	3
<b>PF</b>	0.8	0.8	0.8	0.8	0.8
<b>Hz</b>	60	60	60	60	60
<b>Generator Model</b>	Consult Factory	Consult Factory	S7L1D-G	S7L1D-G	S9M1D-B4
<b>Connection</b>	4 LEAD WYE	4 LEAD DELTA	4 LEAD WYE	4 LEAD WYE	6 LEAD WYE
<b>kWe</b>	2000	2000	2000	2000	2000
<b>AMPS</b>	6948	6021	3011	2408	347
<b>Temp Rise</b>	Consult Factory	Consult Factory	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>- Critical Grade Silencer Mounted</li> <li>- Flexible Fuel Connector</li> <li>- EPA Certified Tier 2</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 through 600VAC</li> <li>- CSA Certified through 600VAC</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 (Qty 2) -20°F 9000W 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:	Mitsubishi	Displacement - Cu. In. (lit):	3,989 (65.4)
Model:	S16R-Y2PTAW2-1	Bore - in. (cm) x Stroke - in. (cm):	6.69 (17.0) x 7.09 (18.0)
Type:	4-Cycle	Compression Ratio:	14.0:1
Aspiration:	Turbo Charged, H2O/Air Intercooled	Rated RPM:	1800
Cylinder Arrangement:	16 Cylinder Vee	Max HP Stby (kWm):	2,923 (2,181)

#### Exhaust System

#### Standby

Gas Temp. (Stack): °F (°C)	979 (526)
Gas Volume at Stack Temp: CFM (m³/min)	19,209 (544)
Maximum Allowable Exhaust Restriction: in. H <sub>2</sub> O (kPa)	23.6 (5.90)

#### 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)
Jacket Water Pump Flow Rate: GPM (lit/min)	489 (1,851)
Intercooler Pump Flow Rate: GPM (lit/min)	243 (920)
Heat Rejection to Jacket Coolant: BTUM (kW)	44,374 (777)
Heat Rejection to Intercooler: BTUM (kW)	44,374 (777)
Heat Radiated to Ambient: BTUM (kW)	39,161 (685)

#### Air Requirements

Aspirating: CFM (m³/min)	7,274 (206)
Air Flow Required for Rad. Cooled Unit: CFM (m³/min)	86,078 (2,436)
Air Flow Required for Heat Exchanger/Rem. Rad. CFM (m³/min)	Consult Factory For Remote Cooled Applications

#### Fuel Consumption

At 100% of Power Rating: gal/hr (lit/hr)	155 (587)
At 75% of Power Rating: gal/hr (lit/hr)	115 (435)
At 50% of Power Rating: gal/hr (lit/hr)	79.2 (300)

#### Fluids Capacity

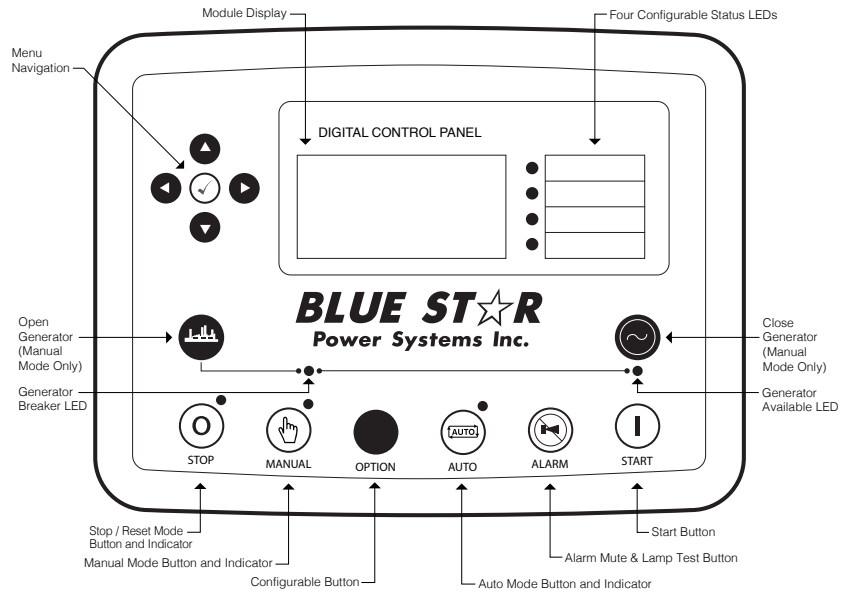
Total Oil System: gal (lit)	60.8 (230)
Engine Jacket Water Capacity: gal (lit)	44.9 (170)
System Coolant Capacity: gal (lit)	182 (689)

Deration Factors: Rated Power is available up to 3280 ft (1000 m) at ambient temperatures to 104°F (40°C). Consult factory for site conditions above these parameters.

## DCP7310 Control Panel

### Standard Features

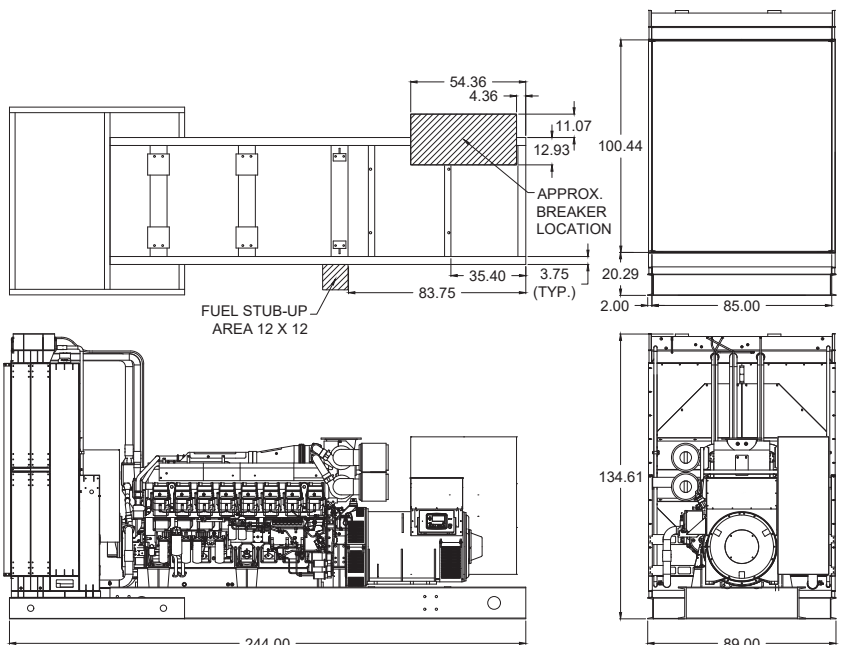
- Digital Metering
- Engine Parameters
- Generator Protection Functions
- Engine Protection
- CAN Bus (J1939) ECU Communications
- Windows-Based Software
- Multilingual Capability
- Remote Communications to DSE2548 Remote Annunciator
- 8 Programmable Contact Inputs
- 10 Contact Outputs
- RS485 Communicator 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>	244 x 89 x 135 in	37,725
<b>Level 1</b>	282 x 110 x 145 in	41,750
<b>Level 2</b>	282 x 110 x 145 in	41,950
<b>Level 3</b>	378 x 110 x 145 in	44,350

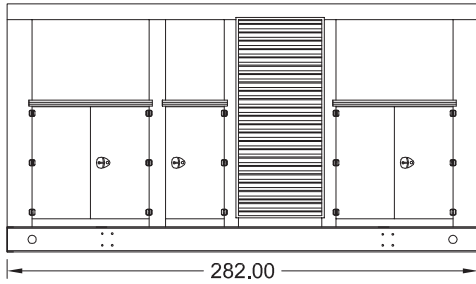
Please allow 6-12 inches for height of exhaust stack.



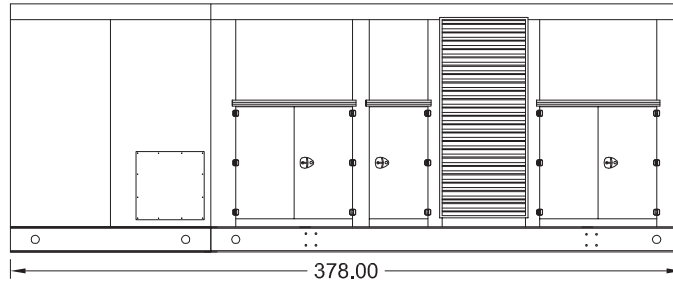
	No Load	Full Load
<b>OPU</b>	96 dBA	98 dBA
<b>Level 1</b>	88 dBA	91 dBA
<b>Level 2</b>	85 dBA	87 dBA
<b>Level 3</b>	82 dBA	84 dBA

## Enclosures

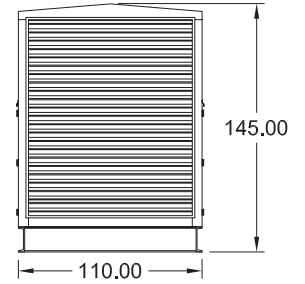
Level 1 & 2 | Side View (Weather Proof)



Level 3 | Side View (Sound Attenuated)



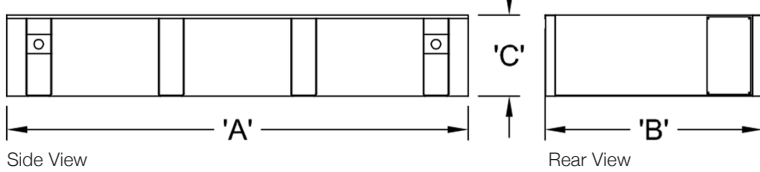
Level 1, 2 & 3 | Intake View



- 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.

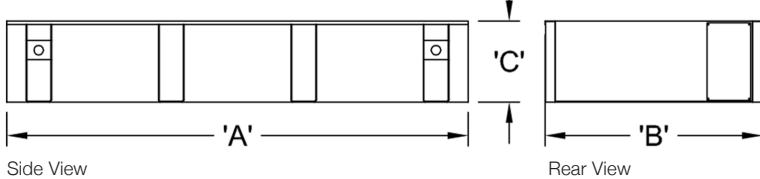
## Double Wall UL 142 Listed Fuel Tanks

OPU / Level 1 / Level 2



	12 Hour 1925 Gallon	24 Hour 3850 Gallon	48 Hour 7700 Gallon
A	282.00	312.00	576.00
B	110.00	110.00	110.00
C	22.00	36.00	36.00

Level 3



	12 Hour 1925 Gallon	24 Hour 3850 Gallon	48 Hour 7700 Gallon
A	378.00	378.00	576.00
B	110.00	110.00	110.00
C	16.00	28.00	36.00

### 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 and fuel tanks 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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