

# 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	744RSL4054	744RSS4292	744FSM4374
<b>Connection</b>	4 LEAD WYE	4 LEAD DELTA	4 LEAD WYE	4 LEAD WYE	6 LEAD WYE
<b>Standby</b>					
<b>kWe</b>	2000	2000	2000	2000	2000
<b>AMPS</b>	6948	6021	3011	2408	347
<b>Temp Rise</b>	Consult Factory	Consult Factory	130°C / 27°C	130°C / 27°C	130°C / 27°C

### Standard Equipment

- |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
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| <p><b>Engine</b></p> <ul style="list-style-type: none"> <li>▶ Radiator Cooled Unit Mounted (50°C)</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>▶ Flexible Fuel Connector</li> <li>▶ EPA Certified Tier 2</li> </ul> <p><b>Listing Certifications</b></p> <ul style="list-style-type: none"> <li>▶ UL 2200 Listed*</li> <li>▶ cUL Listed*</li> <li>▶ CSA Certified*</li> <li>▶ Seismic Certified to IBC 2018</li> </ul> | <p><b>Generator</b></p> <ul style="list-style-type: none"> <li>▶ Brushless Single Bearing</li> <li>▶ Automatic Voltage Regulator</li> <li>▶ ± .25% Voltage Regulation</li> <li>▶ 4 Pole, Rotating Field</li> <li>▶ 130°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>▶ Microprocessor Based Digital Control</li> <li>▶ Interface Connection Box</li> <li>▶ Control Panel Mounted in NEMA 12 Enclosure</li> <li>▶ Base - Structural Steel</li> <li>▶ Main Line Circuit Breaker Mounted &amp; Wired*</li> <li>▶ Critical Grade Silencer Mounted</li> <li>▶ Battery Charger 24V 5 Amp</li> <li>▶ Jacket Water 2 Qty: 9000W 240V w/Isolation Valves</li> <li>▶ Vibration Isolation Mounts (Pad Type)</li> <li>▶ Radiator Duct Flange (OPU Only)</li> <li>▶ Single Source Supplier</li> <li>▶ 2YR / 2000HR Standby Warranty</li> <li>▶ Standard Colors - White / Gray</li> </ul> |
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\*Through 600VAC

## 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:	Turbocharged, H <sub>2</sub> O/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 (m <sup>3</sup> /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)	11,384 (199)

Air Requirements	
Aspirating: CFM (m <sup>3</sup> /min)	7,274 (206)
Air Flow Required for Rad. Cooled Unit: CFM (m <sup>3</sup> /min)	86,078 (2,436)
Air Flow Required for Heat Exchanger/Rem. Rad. CFM (m <sup>3</sup> /min)	Consult Factory For Remote Cooled Applications

Fuel Consumption	
At 100% of Power Rating: gal/hr (lit/hr)	160.1 (606)
At 75% of Power Rating: gal/hr (lit/hr)	116.7 (442)
At 50% of Power Rating: gal/hr (lit/hr)	79.0 (299)

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

### Deration Factors

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

### DGC-2020 Control Panel

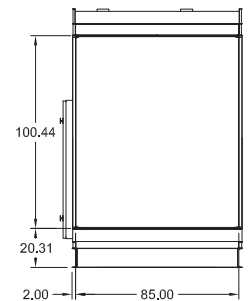
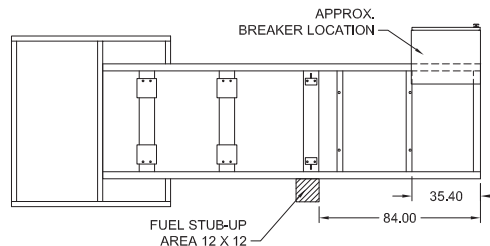
#### Standard Features

- ▶ Digital Metering
- ▶ Engine Parameters
- ▶ Generator Protection Functions
- ▶ Engine Protection
- ▶ CAN Bus ECU Communications
- ▶ Windows-Based Software
- ▶ Multilingual Capability
- ▶ Remote Communications to RDP-110 Remote Annunciator
- ▶ 16 Programmable Contact Inputs
- ▶ Up to 15 Contact Outputs (7 standard)
- ▶ UL Recognized, CSA Certified, CE Approved
- ▶ Event Recording
- ▶ IP 54 Front Panel Rating with Integrated Gasket
- ▶ NFPA 110 Compatible

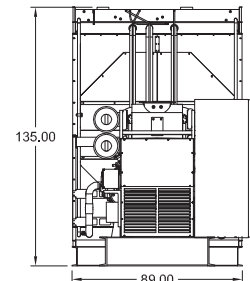
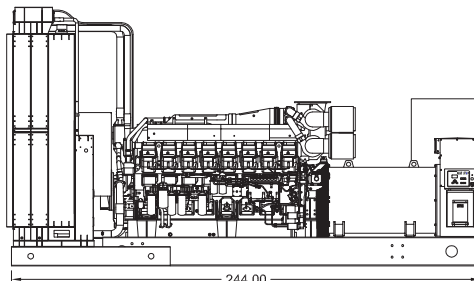


### Weights / Dimensions / Sound Data

	L x W x H	Weight lbs
<b>OPU</b>	244 x 89 x 135 in	37,675
<b>Level 1</b>	282 x 110 x 145 in	41,700
<b>Level 2</b>	282 x 110 x 145 in	41,900
<b>Level 3</b>	378 x 110 x 145 in	44,300



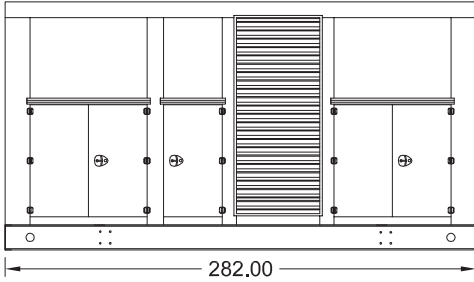
	No Load	Full Load
<b>OPU</b>	96 dBA	98 dBA
<b>Level 1</b>	88 dBA	91 dBA
<b>Level 2</b>	85 dBA	87 dBA
<b>Level 3</b>	82 dBA	84 dBA



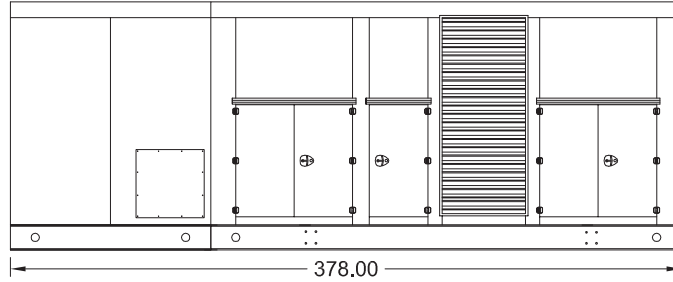
Drawings based on standard open power 480 volt standby generator. Lengths may vary with other voltages. Subject to change without notice. Sound data as measured at 23 feet (7 meters) in accordance with ISO 8528-10 at standby rating.

## Enclosures

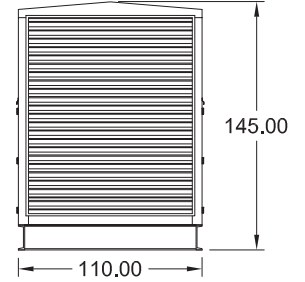
Level 1 & 2 | Side View (Weather Proof)



Level 3 | Side View (Sound Attenuated)

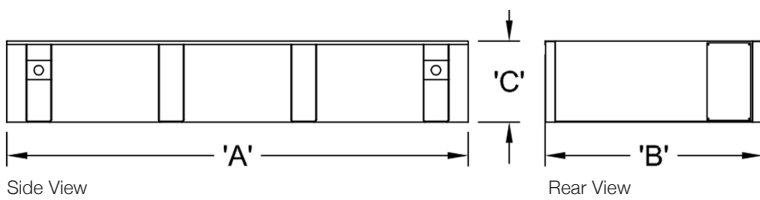
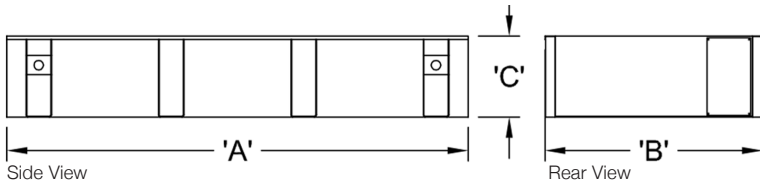


Level 1, 2 & 3 | Intake View



All enclosure models are 200 MPH wind rating certified in accordance with IBC2018 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 system.

## Double Wall UL 142 Listed Fuel Tanks



OPU / Level 1 / Level 2			
	12 Hour 1925 Gallon	24 Hour 3850 Gallon	48 Hour 7700 Gallon
<b>A</b>	282.00	312.00	576.00
<b>B</b>	110.00	110.00	110.00
<b>C</b>	22.00	36.00	36.00

Level 3			
	12 Hour 1925 Gallon	24 Hour 3850 Gallon	48 Hour 7700 Gallon
<b>A</b>	378.00	378.00	576.00
<b>B</b>	110.00	110.00	110.00
<b>C</b>	16.00	28.00	36.00

All specification sheet dimensions are represented in inches.  
 All enclosures and fuel tanks are based on the standard standby unit configuration. Any deviation can change dimensions.  
 Materials and specifications subject to change without notice.

American Owned



American Made

Distributed By:

**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