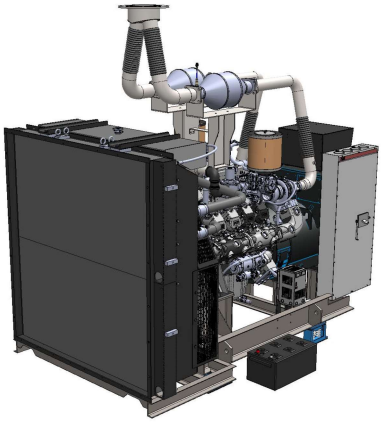
PARAMOUNT POWER SYSTEMS

Natural Gas Genset | NG350PS



Version Code: A01

- 350 **kWe**
- 208 - 600 **Volt**
- 60 **Hz /** 1800 **RPM**
- Natural Gas **Fuel Type**
- Standby **Application**

RATINGS

	VOLTAGE	Hz	PHASE	PF	PRIME POWER 105°C		STANDBY POWER 125°C		Standard Breaker*	Oversized Alternator Available
					kW/kVa	Amps	kW/kVa	Amps		
☐	120/240 V	60	1	1	N / A	---	N / A	---	---	---
☐	120/208 V	60	3	0.8	N / A	---	350 / 438	1214	T.B.D.	N / A
☐	139/240 V	60	3	0.8	N / A	---	350 / 438	1052	1200A (100%)	N / A
☐	240/416 V	60	3	0.8	N / A	---	350 / 438	607	600A (100%)	N / A
☐	277/480 V	60	3	0.8	N / A	---	350 / 438	526	600A (100%)	N / A
☐	347/600 V	60	3	0.8	N / A	---	350 / 438	420	600A (80%)	N / A
☐	2400/4160 V	60	3	0.8	N / A	---	N / A	---	---	---

All ratings are based on ISO-8528-1 and ISO-3046-1 standards. Consult factory for other voltages/ratings.
Prime ratings are capable of 10% overload power for 1-hour in every 12-hours running.
*Other circuit breaker ratings are available.

STANDARD EQUIPMENT

Engine

- Radiator cooled unit mounted
- Pusher Fan & Fan Drive
- Starter & Alternator
- Oil Pump & Filter
- Oil Drain Extension with Valve
- Governor - Electronic Isochronous
- Battery System & Cables
- Air Cleaner (dry single stage)
- Flexible Fuel Connector

Generator

- Brushless Single Bearing
- Automatic Voltage Regulator
- ± .25% Voltage Regulator
- 4 Pole, Rotating Field
- Class F Temperature Rise
- Class H Insulation
- 100% of Rated Load - One Step
- 5% Maximum Harmonic Content
- Nema MG 1, IEEE and ANIS Standards

Additional

- Microprocessor Based Digital Controller
- Generator Mounted, NEMA, Control Panel
- Base - Structural Steel
- Main Line Circuit Breaker
- Battery Charger
- Jacket Water Heater with Isolation Valves
- Vibration Isolation Mounts (Spring)
- Single Source Supplier
- 1 YR/1500 HR Standby Warranty

ONTARIO MADE

PARAMOUNT
POWER SYSTEMS

ENGINE SPECIFICATIONS

Model	PSI
Make	14LHO-NG
Aspiration Type	Turbo Charge-Air-Cooled
Cylinder Arrangement	8 Vee
Combustion Type	Spark Ignition
Displacement: in3(L)	891 (14.6)
Bore x Stroke: in(mm)	5.0x5.6 (128x142)
Compression Ratio	10.5:1
Governor Type	ECU Isochronous
0-100% Load Frequency Regulation	
Steady State Frequency Regulation	+/- 0.25%
Rated Speed:RPM	1800
Gross Power:BHP(kWm)	536 (400)

FUEL SYSTEM

Fuel Type	Natural Gas
Supply Inlet Connection	2" NPT
Recommended Inlet Pressure:	14" - 18" w.c. (3.5 - 4.5 kPa)
Max. Supply Piping Press. Drop:	1 " w.c. (0.25 kPa)

FUEL CONSUMPTION

Max Standby BTUH at 1000 BTU/Ft 3	4,162,500
Max Prime BTUH at 1000 BTU/Ft 3	N / A
75% Standby BTUH at 1000 BTU/Ft 3	3,200,000
50% Standby BTUH at 1000 BTU/Ft 3	2,100,000

EXHAUST SYSTEM

Engine Manifold Type	Water Cooled
Exaust Flow: cfm (m3/min)	1807 (51)
Exaust Temperature: °F (°C)	1030 (554)
Max Back Press: “wc (kPa)	11.47 (2.9)

EXHAUST EMISSIONS

Nitrogen Oxides(NOx)	0.013 g/kw-hr
Particulate Matter (PM)	0.0 g/kw-hr
NM Hydrocarbon (NMHC)	0.0 g/kw-hr
Carbon Monoxide (CO)	0.416 g/kw-hr
EPA Certification	Stationary Emergency
MOE Standby Compliant	O.Reg. 524/98
MOE Non-Emergency Compliant	EBR # 010-2463

ELECTRICAL SYSTEM

Starting Voltage: DCV	24
Alternator Ratings:AMPS	45
Min. Battery: QTY x CCA	2 x 900

LIQUID CAPACITY

Total Oil System: USG (L)	8.23 (31)
Engine Coolant: USG (L)	9.5 (36)
Engine + Radiator Coolant: USG(L)	31.6 (120)

LUBRICATION SYSTEM

Type	Full Pressure
Oil Filter: QTY x Type	2x Spin-On
Oil Cooler	Integral

COOLING SYSTEM

Cooler Type	Unit-Mounted Radiator
Max Ambient Temp: °C	50
Water Pump Type	Centrifugal
Fan Type	Pusher
Fan Power: HP (kWm)	22 (16)

AIR REQUIREMENTS

Combustion Air: cfm (m3/min)	635 (18)
Cooling Air: cfm (m3/min)	29,970 (849)
Max Back Press: “wc (kPa)	1.0 (0.25)

HEAT REJECTION TO AMBIENT AIR

Engine: BTUM (kW)	3912 (68.8)
600V Alternator: BTUM (kW)	1364 (24)

AC ALTERNATOR

Make	Stamford
Type	S4 Series
Exciter Type	Permanent Magnet
Voltage Regulator	MX321
Winding Insulation	Class H
Stator Pitch	2/3
Bearing: QTY, Type	Single, Sealed
Coupling	Flexible Discs
Amortisseur Windings	Full
V. REG. 0-100% Load: %	+/- 0.5
Sustained Short Circuit	300% for 10 seconds

PEAK MOTOR STARTING kVa (600V Alternator)

Standard Alternator at 35% V-Dip	1,425
Standard Alternator at 15% V-Dip	475
Oversize Alternator at 35% V-Dip	N / A
Overside Alternator at 15% V-Dip	N / A

PARAMOUNT POWER SYSTEMS

AGC-150, ALL IN ONE GENERATOR CONTROLLER

Six different applications can be programmed:

Island Mode: Prime power with stand alone or synchronized generators

Automatic Mains Failure: Critical and emergency standby, black-start

Base-Load Fixed Power: Fixed kW setpoint with building load

Peak Shaving: Generator supplies peak load demand paralleled to the gird

Load Take-Over: Load is moved from grid power to generator power

Mains Power Export: Generator supplies power back to the grid.

- Easy to use powerful microprocessor controller with graphical anti-glare LDC display
- Synchronize 3 ways: Dynamic, Static, Close before Excitation
- CANbus, R5-485 Mondnbus RTU, Ethernet Modbus TCP/IP
- Smart Buttons: only the relevant function buttons appear
- 500 Event log / 500 Alarm log
- 3-Phase Sensing with +/- 1% accuracy
- Emulation mode for testing and commissioning

Measurments
AC Voltage (V)
AC Frequency (Hz)
AC Current (A)
Power Factor (PF)
Real Power (kW)
Apparent Power (kVA)
Reactive Power (kvar)
Oil Pressure (psi)
Coolant Temperature (C)
Fuel Level (%)
Engine Run Time (hrs)
Engine Speed (rpm)

Panel Mounted Devices
Audible Alarm Horn
Emergency Stop Button

Timers
Engine Start
Engine Cooldown
Oil Pressure Bypass
Overcrank
Cycle Crank

Digital Outputs
Generator Running
Common Alarm
Common Shutdown

Synchronizing Protection
Sync Check
Reverse Power
Breaker External Tip
Breaker Command Failure
Under/Over Excitation

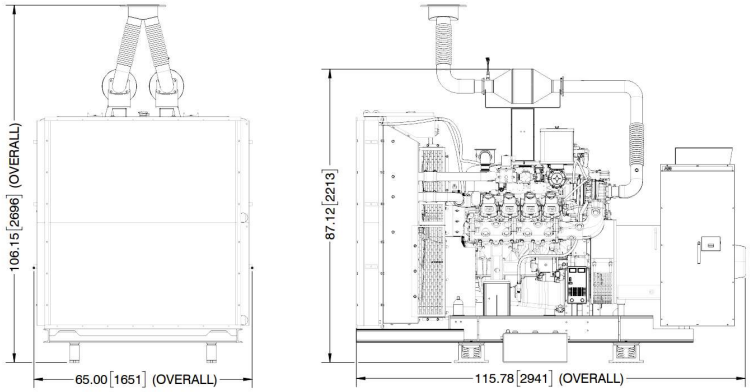
Alarms
Not in Auto
Low Engine Temperature
High Engine Temperature
Low Oil Pressure
Low Fuel Level
Day Tank Leak
Underfrequency
Overcurrent
Undervoltage
Low Battery Voltage
High Battery Voltage
Weak Battery
Intake Damper Failure
ATS Bypass / Not in Auto
Breaker Not Closed
Gas Valve Closed

Shutdowns
Overcrank
Overspeed
High Engine Temperature
Low Oil Pressure
Emergency Stop
Low Coolant Level
Underfrequency
Overcurrent
Undervolatge
Overvoltage
Sensor Fail / Wire-Break
ECU Comms Fail

User Configurable
1x Analog Input
6x Digital Input
3x Digital Input

Complies with CSA-C282-19 Table 1 Requirements

GENERATOR SPECIFICATIONS



Open Unit Weight: Lbs. (kg)
8,500 (3,855)

PARAMOUNT POWER SYSTEMS

STANDARD FEATURES

- Alternator Protection
- Battery, Battery Rack and Cables
- 10A Automatic Battery Charger
- Local Emergency Stop Button
- Oil Drain Extension
- Standard Air Cleaner w/ Restriction Indicator
- Block Heater w/ Thermostat
- Radiator Duct Flange
- Engine Fluids
- Spring Vibration Isolators
- Submittal Package
- Owner's Manual
- 1-Year / 1500-Hour Parts & Labour Standby Warranty

AVAILABLE OPTIONS

Certifications and Specifications Available:

- ☐ ESA Electrical Certification
- ☐ ULC-S601 Sub-Base Fuel Tank Certification
- ☐ TSSA Sub-Base Fuel Tank Pre-Certification
- ☐ Seismic Approval
- ☐ CSA-C282 Compliance
- ☐ CSA-Z32 Compliance

Cooling System Options:

- ☐ Remote Radiator (Horizontal or Vertical Options)
- ☐ Heat Exchanger(s)

Controller Options:

- ☐ 8-Relay Output Board
- ☐ 16-Light Remote Serial Annunciator Panel
- ☐ Insight Remote Monitoring Service
- ☐ Protocol Converter

Fuel System Options:

- ☐ Sub-Base Fuel Tank (diesel/bi-fuel units only)
- ☐ Inlet Filter (natural gas/propane/bi-fuel units only)
- ☐ Stainless Steel Flexible Fuel Connector

Miscellaneous Options:

- ☐ Alternator Anti-Condensation Heater
- ☐ Selsmic Mounts
- ☐ Crankcase Ventilation Filter
- ☐ Permanent Load Bank (Loose)
- ☐ Oversized Alternator for increased motor starting

Circuit Breaker Options:

- ☐ 100% CSA Current Rating
- ☐ Thermal-Magnetic Emergency Power Breaker
- ☐ Electronic LI Emergency Power Breaker
- ☐ Electronic LSI Emergency Power Breaker
- ☐ Electronic LSIG Emergency Power Breaker
- ☐ Unit-Mounted Load Bank Breaker

Enclosure Options:

- ☐ Skin-Tight Sound Enclosure - ☐ Floor Plate
- ☐ Walk-In Sound Enclosure

(All enclosures c/w internal exhaust silencer to match enclosure dBa rating)

- ☐ Exhaust Stack Extension,1m above encl. roof (Loose)
- ☐ CSA-C282 Enclosure Pkg. (Heater, Lighting & Panel)
- ☐ Exterior Load Bank Camlock Connections

Exhaust Options for Indoor Units:

- ☐ Exhaust Silencer (various grades & style available)
- ☐ Stainless Steel Flexible Exhaust Connector

Paralleling Options:

- ☐ Motorized Circuit Breaker
- ☐ Master Interface Panel (Loose)
- ☐ Custom Switchgear Controls Only (Field-Installed)
- ☐ Custom Switchgear c/w Controls (Factory-Installed)

Testing Options:

- ☐ Extended Duration Factory Test
- ☐ Witness Factory Acceptance Test
- ☐ Rated Power Factor Test
- ☐ CSA-C282 On-Site Start-Up Testing

Warranty Options:

- ☐ 2-Year / 1500-Hour Parts & Labour Standby
- ☐ 5-Year / 1500-Hour Parts & 2-Year Labour Standby
- ☐ 5-Year / 1500-Hour Parts & Labour Standby
- ☐ 1-Year / Unlimited-Hours Parts & Labour Prime Power

Maintenance Options:

- ☐ Basic Spares Kit: Oil & Fuel Filters plus Drive Belts
- ☐ Weekly Contract to CSA-C282 Table-2
- ☐ Monthly Contract to CSA-C282 Table-3
- ☐ Semi-Annual Contract to CSA-C282 Table-4
- ☐ Annual Contract to CSA-C282 Table-5
- ☐ Quinquennial Contract to CSA-C282 Table-6

Looking for another option? Please contact Paramount Power Systems to find a suitable solution for you.