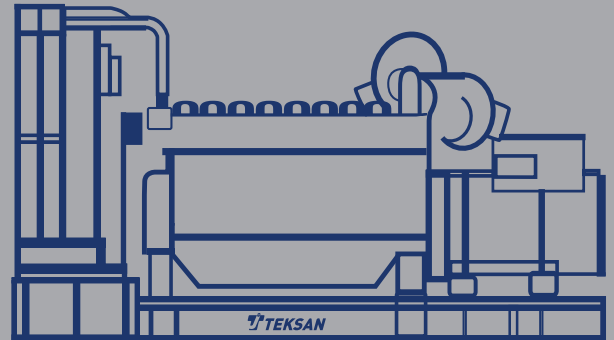


# TJUG150PS

## Industrial Gaseous Generator Sets



### Genset Standby Power Rating

Voltage	208/120V	240/120V	480/277V	600/347V	240/120V
Phase	3	3	3	3	1
Pf	0,8	0,8	0,8	0,8	1
Standby kWe (NG)	150kW	150kW	150kW	150kW	150kW
Standby Amps (NG)	520A	451A	225A	180A	625A
Standby kWe (LP)	125kW	125kW	125kW	125kW	125kW
Standby Amps (LP)	433A	375A	187A	150A	520A
Alternator Model	TAL044L	TAL044L	TAL044J	TAL044J	TAL046C
Temp Rise	125 / 40 °C	125 / 40 °C	125 / 40 °C	125 / 40 °C	125 / 40 °C
Connection	12 Leads WYE	12 Leads Delta	12 Leads WYE	6 Leads WYE	12 Leads DD

### Continuous Power

The maximum power which a generating set is capable of delivering continuously whilst supplying a constant electrical load. Average load can be 100%. The generator must not be overloaded.

### Prime Power

The maximum power which a generating set is capable of delivering continuously whilst supplying a variable electrical load. Average load should be 70%. The generator can be overloaded 10% for 1 hour per 12 hrs.

### Standby Power

The max power available during a variable electrical power sequence, under the stated operating conditions, for which a generating set is capable of delivering in the event of a utility power outage or under test conditions for up to 200 hrs of operation per year under average of 70% load. Overloading isn't permissible.

### Certifications & Standards

The Generator set is designed and manufactured in a facility certified to **ISO9001:2015, ISO14001:2015, ISO45001-2018** and **ISO10002:2014** standards.

Generator set is **UL2200**, cUL listed and meets **ISO 8528-5**

The generator set, with its components, are **prototype tested**, factory-built and production tested per UL standards.

The generator set meets **NFPA110 Level 1** when equipped with the necessary accessories and installed per NFPA standards.

### Application Data - Engine

Engine	
Manufacturer	PSI
Model	8.8L T-CAC
Number of Cylinders	V-8
Cycle	4
Cubic Capacity	8.8 liters
Bore x Stroke	110.5 mm
Stroke	114.3 mm
Aspiration	Forced Induction
Combustion Ratio	10.1:1
Gross Intermittent Power Rating at the Flywheel - NG	194.98 kW
Gross Intermittent Power Rating at the Flywheel - LP	171.6 kW
Rated rpm	1800
Speed Regulation	±0.5%

Electrical System	
Starting Motor Voltage	12V
Battery	1 x 102Ah
Battery CCA Rating	860A

Fuel System	
Fuel Type	NG, LP Vapor or Dual Fuel
Maximum EPR Rated Pressure	1 psi (6.9 kPa)
Fuel Supply Pressure to EPR	7.0 - 11.0 inH2O
Minimum NG Supply Pipe Size	1-1/4" NPT
Minimum LPG Supply Pipe Size	3/4"

Air Induction System	
Combustion Air Required	10.33 m3/min
Max. Allowable Intake Air Restriction - Clean	3.0 inH2O
Max. Allowable Intake Air Restriction - Dirty	13.0 inH2O

Fuel Consumption - NG	
Standby Power (100%)	55.5 m3/hr (1960 CFH)
At 75% of Standby	43.0 m3/hr (1518 CFH)
At 50% of Standby	31.0 m3/hr (1095 CFH)

Fuel Consumption - LP	
Standby Power (100%)	20.2 m3/hr (713 CFH)
At 75% of Standby	15.5 m3/hr (547 CFH)
At 50% of Standby	11.3 m3/hr (399 CFH)

Cooling System	
Ambient Capacity of Radiator	122 °F (50 °C)
Coolant Capacity - Engine Only / Total	13.7 liters / 28.0 liters
Maximum Allowable Static Pressure on Rad. Exhaust	0.5 inH2O
Heat Rejection to Coolant	87.9 kW
Water Pump Flow Rate	125 liters/min
Heat Radiated to Ambient	55.1kW
Cracking Temperature	71 °C
Full Open Temperature	85 °C

Exhaust System	
Type	Air Cooled Manifold
Max Gas Temperature	1350 °F (732 °C)
Intermittent Rating Catalyst Configuration	Dual Substrate
Maximum allowable Back pressure	10.2 kPa
Exhaust Volumetric Flow at Rated Power @ 1350 F	1177.5 cfm

Lubrication System	
Oil Specification	SAE 5W-30 API Rating of SM or Newer
Maximum Allowable Oil Temperature	121 °C
Engine Oil Capacity	7.57 liters

### Standard Features - Alternator

Brushless Single Bearing

125/40 °C Temperature Rise

Class H Insulation

Low waveform distortion with non-linear loads

EC 60034-1; CEI EN 60034-1; NEMA MG 1.22, NF 51- 100,111

AREP Excitation

300% Short Circuit Capability

Low reactance 2/3 pitch windings

Self-ventilated and drip-proof construction

BS 4999-5000; VDE 0530, OVE M-10

### Application Data - Alternator

Manufacturer	Leroy Somer				
Type	4 Poles, Brushless				
Protection	IP 23				
Voltage Regulation	± 0.25%				
One Step Load Acceptance	100% of rated load				
Bearing	Single				
THD in Linear Load	< 5%				
Waveform: NEMA TIF	< 50				
Altitude	≤ 1000 meters				
Over Speed	2250 rpm				
AVR	D350				
Genset Voltage	208/120V	240/120V	480/277V	600/347V	240/120V
Alternator Model	TAL044L	TAL044L	TAL044J	TAL044J	TAL046C
Leads	12 - WYE	12 - Delta	12 - WYE	6 - WYE	12 – DD
P.F.	0,8	0,8	0,8	0,8	1
Power @ Continuous 40 °C	195kVA / 156kW	195kVA / 156kW	188kVA / 150kW	186kVA / 148.8kW	152kVA / 152kW
skVA @ 30% Voltage Dip (P.F. = 0.6)	865kVA	865kVA	435kVA	280kVA	-
Efficiency @ 100% load	93,50%	93,50%	92,90%	93%	86,35%
Short Circuit Current @ 1000ms	650A	1125A	550A	550A	-

### Application Data - Circuit Breaker

Genset Voltage	208/120V	240/120V	480/277V	600/347V	240/120V
ABB (80% Rated) Breaker Model	T5N 600	T5N 600	XT3N 225	XT3N 225 - 200	T5N 600
Current Rating (In)	600A	600A	225A	200A	600A
Trip Unit	LS/I	LS/I	TMF	TMF	LS/I

### Control Panel

Manufacturer	DSE - Deep Sea Electronics
Model	7310 MKII
DC Supply	8 to 35V Continuous
Generator Voltage Range (Ph-Ph)	26V to 719V AC
Generator Frequency Range	3,5Hz to 75Hz
Standards	BS EN 61000-6-2, BS EN 61000-6-4, BS EN 60950, BS EN 60529 BS EN 60068-2-1, BS EN 60068-2-2 BS EN 60068-2-6, BS EN 60068-2-30 BS EN 60068-2-78, BS EN 60068-2-27



### Key Features

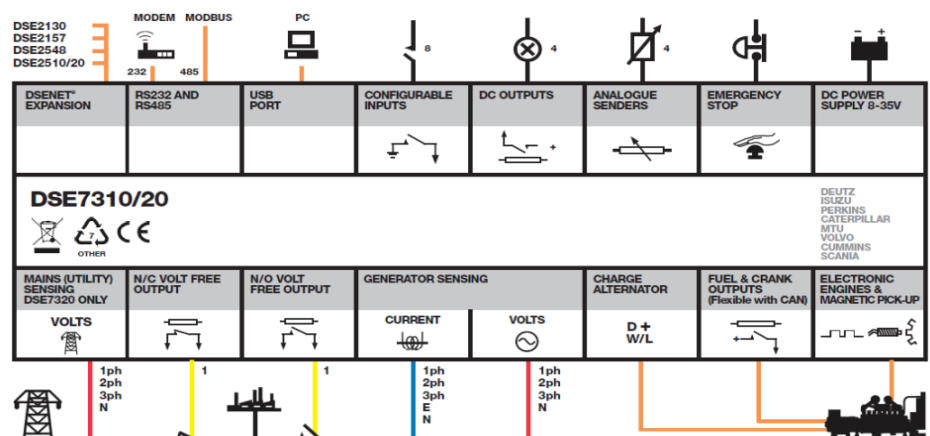
License free PC software
4-Line back-lit LCD text display
Five key menu navigation
LCD Alarm Indication
DSENet expansion compatibility
Internal PLC editor
Protection disable feature
Data logging facility
Fully configurable via PC
Front panel configuration
Power safe mode
6 configurable DC outputs
2 configurable volt free relay outputs
6 configurable analogue/digital inputs
8 configurable digital inputs
Configurable 5 stage dummy load and load shedding outputs
Backed up real time clock
Fuel usage monitor and low fuel level alarms
Remote SCADA monitoring via DSE Configuration Suite PC Software
Advanced SMS messaging (additional external model required)
Start & Stop capability via SMS messaging
Configurable event log (250)
Multiple date and time scheduler

### Protections

✓ Gen. Voltage – under / over
✓ Gen. Freq. – under / over
✓ Engine Speed – under / over
✓ Engine Oil Pressure – low
✓ Engine Temp – low / high
✓ Battery Voltage – low / high
✓ Weak Battery
✓ Fail to Start / Stop
✓ Charge Alternator Fail
✓ Over Current & Load (kW/kVAR)
✓ Unbalanced Load
✓ Independent Earth Fault
✓ Reverse Power
✓ Loss of Speed Signal

### Instruments

✓ Gen. Voltage (L-L/L-N)
✓ Gen. Frequency
✓ Engine speed
✓ Oil Pressure
✓ Water Temperature
✓ Battery Voltage
✓ Run Time
✓ Phase Sequence
✓ Power monitoring (kWh/kVAh/kVArh)
✓ Power (kW/kVAh/kVArh)
✓ Power Factor
✓ Generator Current
✓ Generator Load (%)
✓ Earth Current



### Standard Features - General

Heavy duty structural steel base frame  
Battery charger  
Jacket Water Heater  
Oil & Coolant Drain Extensions  
Operations Manual

Critical grade silencer  
Battery tray and cables  
Heater Isolation Valves  
Rubber vibration Isolator  
Standby Limited Warranty

### Battery Charger

Manufacturer DSE  
Model 9470 MKII  
Operation Voltage (L-N) 90V to 305V  
Output Current 10A

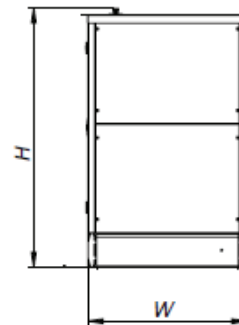
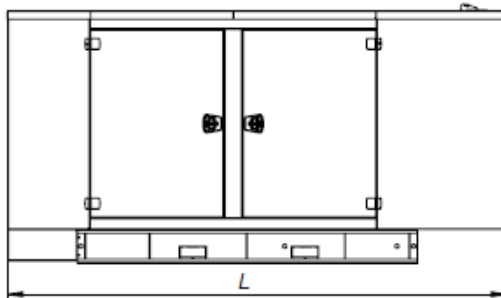
### Jacket Water Heater

Manufacturer Hotstart  
Model TPS181GT10-000  
Operation Voltage 120V  
Power 1800W

### Dimensions, Weights & Sound Levels

	L x W x H (inches)	Weight (lbs)	Sound Level *
Open Skid	99 x 46 x 52	TBA	-
Level 2 Enclosure	145 x 47 x 75	TBA	TBA
Level 3 Enclosure	TBA	TBA	TBA

\*All measurements are approximate and for estimation purposes only. \* Sound data as measured at 23 feet (7 meters) in accordance with ISO 8528-10 at stand-by power rating



### Sound Attenuated Enclosure (Option)

Compatible with 2000/14/EC directives,  
Factory built, UL Certified  
Amplified paint against corrosion and rust  
Exceeds 2000hours salt spray test  
Level 2 / 3 Sound Level Compliant  
Heavy Duty Steel / Aluminum Structure  
High performance sound absorb material  
Vertical air discharge  
Exhaust muffler inside the canopy



### Available Options

#### Circuit Brakers

- ☐ Magnetic Trip
- ☐ Thermal Magnetic Trip
- ☐ Electronic Trip LS/I
- ☐ Electronic Trip LSI
- ☐ Electronic Trip LSIG
- ☐ 80% Rating
- ☐ 100% Rating
- ☐ Electrically Operated CB (paralleling)
- ☐ Shunt Trip – wired to controller
- ☐ Auxiliary Contact – volt free contact

#### Alternator

- ☐ Upsize Alternator
- ☐ Space Heater
- ☐ RTD Sensors

#### Electrical

- ☐ GFCI Receptacle Outlet
- ☐ Load Center
- ☐ Power Outlet (14-50R, 120/240V, 50A)
- ☐ Power Outlet (TT30R, 120V, 30A)
- ☐ Power Outlet Panel (120/240V, 80A) NEMA5-20R, NEMA14-50R, TT-30R
- ☐ Surge Protector

#### Control System

- ☐ Remote Annunciator Panel – 8 lights
- ☐ Remote Annunciator Panel – 16 lights
- ☐ Remote Annunciator Panel – 24 lights
- ☐ Common Alarm Relay – V free contact
- ☐ Generator Run Relay – V free contact
- ☐ Control Panel Heater
- ☐ Dry Contacts Expansion Relay
- ☐ Remote E-Stop Switch
- ☐ Remote E-Stop Switch – Break Glass
- ☐ Remote Monitoring (DSE892 SNMP)
- ☐ Remote Monitoring (DSE890 Webnet)
- ☐ Paralleling System Upgrade
- ☐ Manual Voltage Adjust
- ☐ Manual Speed Adjust

#### Miscellaneous

- ☐ ATS Panel
- ☐ Rated Power Factor Factory Testing
- ☐ Enclosure Heater
- ☐ Oil Pan Heater
- ☐ Spring Isolators
- ☐ Crankcase Ventilation Filter
- ☐ Critical Silencer Set w/Open Skid Unit

#### Enclosures

- ☐ Sound Attenuated Level 2
- ☐ Sound Attenuated Level 3
- ☐ Enclosure DC light w/timer
- ☐ Enclosure AC light
- ☐ Enclosure Space Heater
- ☐ Motorized Air Inlet Damper
- ☐ Gravity Radiator Louver

#### Fuel Tank

- ☐ Dual Fuel Operation
- ☐ Fuel Pressure Low, Alarm
- ☐ Fuel Filter
- ☐ Gas Regulator

#### Battery System

- ☐ Starting Batteries
- ☐ Battery Charger (NFPA110 Compliant)
- ☐ Battery Wrap Heater
- ☐ Battery Restraint
- ☐ Battery Disconnect Switch

#### Warranty

- ☐ 5 Years Extended Limited Warranty

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