LIFE CYCLE POWER

MOBILE TURBINE

LCP SMT60

The LCP SMT60 Turbine utilizes the Taurus 60 turbine from Solar in a single trailer package to provide the quickest path to power available on the market. It can operate on diesel or natural gas, requires no after-treatment or water injection to achieve emissions as low as 15ppm NOX, and can be paralleled with any of Life cycle Powers other turbines to give as large a microgrid as needed.

PERFORMANCE INFO-ELECTRICAL*		
Frequency Options	Hz	60
Power Output (Standby)	kW	5,670*
Power Output (Prime)	kW	5,000*
Power Output (Continuous)	kW	5,000*
Voltages(s) Output	V	13,800 +/-10%
Maximum Amps/Phase	Amps	240
Black Start Power Requirement	kW(V)	350kW (480V)
Max Transient Load (Load Step)	kW	5,000
Startup Time (From Ready to Start)	mins	7
Cool Down Time Before Restart	mins	5
Max Altitude	ft	8,000
Max Ambient Temp	deg F	120
Min Ambient Temp W/O Winterization	deg F	0
PERFORMANCE INFO-FUEL**		
Specific Energy Consumption (Heat Rate)	btu/kW-hr	10,830
Specific Fuel Consumption – NG	scf/kW-hr	10.9
Specific Fuel Consumption – Propane	Gal/kW-hr	0.12
Specific Fuel Consumption – Diesel	Gal/kW-hr	0.07
Ng Fuel Pressure Range	psi	225-500

** Power output is based on iso conditions (sea level and 59°F), 60Hz, for actual performance, refer to derate tables below or contact Lifecycle Power, 50Hz performance (if available) can be provided on request*

*** Fuel consumptions are based on 100% loading at ISO conditions utilizing commercial spec fuels, for detailed performance refer to derate table below or contact Life Cycle Power*

Key Features of the SMT 60

- Solar 5.7 Mwe Taurus 60 gas turbine.
- 60Hz, 13.8KV generator (unit auxiliary transformer to run at 12.47KV or 13.8KV)
- Single trailer design with the drive train and systems fully integrated onto the trailer.
- Shortest setup time in the industry.
- SoLoNOx™ equipped Dual Fuel system provides the industry's lowest regulated.
- emissions across the widest range of fuels with no water injection
- Operable on either diesel or natural gas fuels up to 100% of load
- Proven capabilities operating on high BTU gas fuels- 1,400btu/ft3 standard, 1,900btu/ft3 with treatment.
- Fitted with 'slow roll' cooling control for faster restart times following shutdowns.
- Hydraulic leveling system with built-in legs levels the package to within tolerance
- Newly designed low-speed coupling with locking device enabling coupling to be left in place for all transit moves.
- Turbine air inlet, generator ventilation and package ventilation integrated into the package eliminates ducting on the roof and the need for crane lifts, there is no requirement for the installation crew to gain access to the roof.
- Air for the fuel pilot system provided by two nitrogen bottles (vs. traditional air compressor) located in the Electrical Equipment Compartment (EEC) with the capacity for approximately 200 starts.
- Only four main connections – LCP provided black start (diesel generator) for start-up power to the turbine package, natural gas service connection or liquid fuel supply to off skid liquid fuel module, output power to customer, and grounding connections.
- No oil or spark plug changes required (unlike engines) means no shutdown except for OEM maintenance requirements of water wash and borescope inspection every 4,000 hours.
- Simply PARK, PLUG & PLAY, no concrete pad required.

FROM PIPELINE TO POWERLINE. WE DELIVER.

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PERFORMANCE INFO-NOISE

Noise Level (3ft)	dBa	89
Noise Level (100)	dBa	81
Noise Level (3ft w/ Silencer)	dBa	87
Noise Level (100ft w/ Silencer)	dBa	75

PERFORMANCE INFO-EMISSIONS***

		25 PPM CAL	25 PPM CAL
Specific Water Consumption	Gal/kW-hr	0	0
Emission - NOX	g/kW-hr (g/bhp-hr)	0.28 (0.21)	0.28 (0.21)
Emission - CO	g/kW-hr (g/bhp-hr)	0.12 (0.09)	0.12 (0.09)
Emission - THC	g/kW-hr (g/bhp-hr)	0.06 (0.04)	0.06 (0.04)
Emission - NMHC	g/kW-hr (g/bhp-hr)	0 (0)	0 (0)
Emission - PM	g/kW-hr (g/bhp-hr)	0 (0)	0 (0)
Emission - SO	g/kW-hr (g/bhp-hr)	0 (0)	0 (0)
Emission – CO2	g/kW-hr (g/bhp-hr)	724 (539)	724 (539)

PHYSICAL INFORMATION

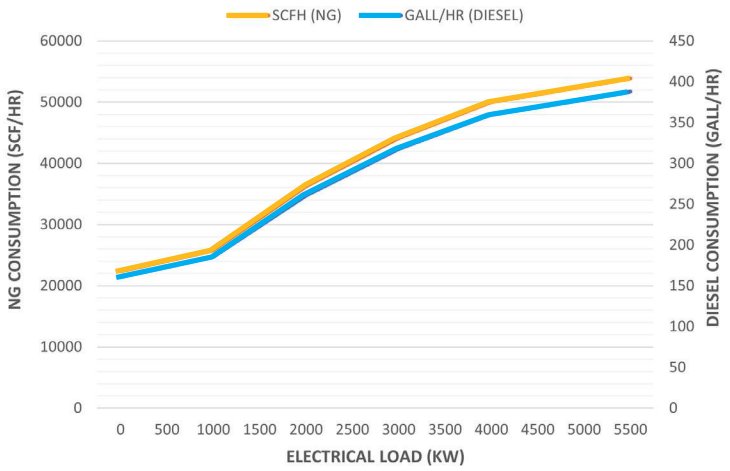
Qty Of Trailers Required		1
Weight (Trailer 1)	lbs.	110,960
Weight (Trailer 2) For Diesel Use Only	lbs.	7,000
Total Weight	lbs.	110,960
Ground Preparation Requirements	Compacted	
Dimensions (Trailer 1)	LxWxH (ft)	56x8.5x13
Dimensions (Trailer 2) Liquid Fuel Skid	LxWxH (ft)	15x7x7
Total Installed Footprint Natural Gas Fuel	LxW (ft)	60x10
Total Installed Footprint Include Liquid Fuel Skid	LxW (ft)	80x20
Average Install Man Hours	hrs	4

ONSITE CONNECTIONS**

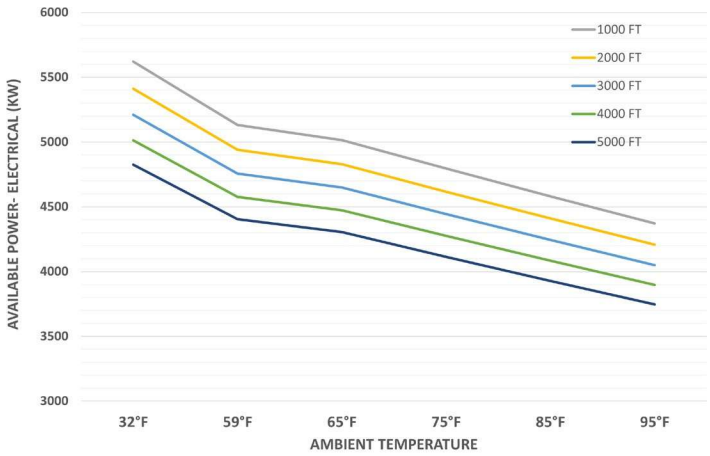
Fuel NG	2” 300lb ANSI Flange
Fuel Diesel	1” JIC hose Connection
Electrical Load Out	Dead Break Connections 350 MCM / Phase
Grounding	High Resistance Grounding System

*** Emissions based on pipeline quality NG fueled & iso conditions. For site-specific emissions performance contact Life Cycle Power*

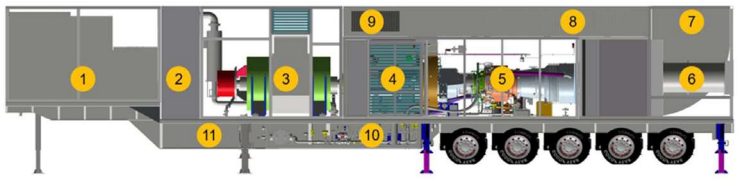
LCP SMT60 FUEL CONSUMPTION VS. LOAD



SMT60 MAX AVAILABLE POWER



MAJOR COMPONENTS



1. EEC (Electrical Equipment Compartment)
2. MV (Medium Voltage Connections, SWG, CT’s ,PT’s)
3. Generator Compartment
4. Oil Cooler (Left side)
5. Turbine Compartment
6. Enclosure Ventilation Fans (left side)
7. Turbine Exhaust
8. Turbine Air Inlet Filters (left side)
9. Generator Ventilation Fans (Qty 2)
10. SoLoN0x Gas Fuel System
11. Hydraulic Levelling System