



TIER 4 FINAL G-DRIVE ENGINE

FUEL: Diesel

ENGINE: Hyundai Infracore

SPECIFICATION SHEET

Fuel	Rating	Standby Power	Prime Power
Diesel	Power: hp (kW) 1800 rpm	21.98 (16.4)	19.83 (14.8)
	Power: hp (kW) 3600 rpm	13.4 (10.0)	12.1 (9.0)

Rating Definitions: Power ratings of Emergency Standby and Prime are in accordance with ISO 8528. Fuel Stop power in accordance with ISO 3046. Standby Power Rating - is applicable for supplying emergency power for the duration of the utility poweroutage. No overload capability is available for this rating. A standby rated engine should be sized for a maximum ofan 80% average load factor and 200 hours of operation per year. This includes less than 25 hours per year at the Standby Power rating.

Prime Power Rating - is available for an unlimited number of hours per year in variable load application. Variable load should not exceed a 70% average of the Prime Power rating during any operating period of 24 hours. The Total operating time at 100% Prime Power shall not exceed 500 hours per year. A 10% overload capability isavailable for a period of 1 hour within a 12 hour period of operation. Total operating time at the 10% overloadpower shall not exceed 25 hours per year...

STANDARD FEATURES:

DT Power Corp Hyundai Infracore Compact Diesel Engines are designed for efficiency, as well as performance, with the durability and quality you expect. Lower fuel consumption, longer maintenance intervals and maintenance-free after-treatment systems lowers the total cost of ownership over the life of your engine.

With its strong power at small displacement, Hyundai Infracore

Compact Diesel Engines are ideal for a wide variety of compact stationary and mobile generator set systems.

Key System Features are:

- EPA Tier 4 Engine certified for Industrial applications
- · Packaged with flywheel housing to SAE standards
- Flywheel machined to SAE J620 adaptation
- · Compact design to adapt to multiple OEM applications
- · Adds value to off-highway equipment
- No DPF (Diesel Particulate Filter)
- Strong power and high low-end torque for enhanced performance
- · Low total cost of ownership

Engine:

- Hyundai Infracore SU103N
- Rated for high intermittent power with high torque lower down the power curve for better performance
- Cooling system capable of operation at 120°F ambient
- · Overhead valve assembly with 2-intake and 2-exhaust valves
- · Diesel direct injection
- · Bosch K-type mini pump
- · ECU Woodward APECS 4800
- · Naturally aspirated
- · Compression ratio 21.0:1
- · DOC (Diesel Oxidation Catalyst) aftertreatment

Engine Mountings and Drive Configuration:

- SAE #5 flywheel housing
- · Fittings for mounting exhaust, radiator, and air cleaner
- · All rotating surfaces protected with guards
- · Oil and water drain lines



MODEL TPD10-G G-Drive Diesel Engine

Maintenance:

- · Oil filter change 500-hours
- · Fuel filter change 500-hours
- · Valve adjustment after 1000-hours

After Treatment:

While traditional engine makers are relying on conventional technologies to satisfy the regulations of emission control, Hyundai Infracore Infracore has developed a unique after-treatment system. Hyundai Infracore Compact Diesel engines use a Non-DPF System which is a much simpler system than the DPF-type systems

Consider the benefits:

· Elimination of unnecessary parts (DPF with complicated sensors, wires, diagnosis lamp and etc)

solutions - no concerns on maintenance or quality issues.

- · Prevention of after-treatment quality issues
- Maintenance Free (No regeneration process and ash cleaning required)

Advanced Fuel Injection System:

The fuel injection system of Hyundai Infracore Compact Diesel Engines utilize the most advanced design for fuel mixing and combustion within the cylinder head. The Bosch K-type mini pump provides the latest in small compact diesel direct injection technology.

- · Low exhaust gas emission
- Low noise vibration
- Better fuel efficiency
- · Optimized governing for each application

WARRANTY:

· Engine covered under the original equipment manufacturer's warranty - consult DT Power Corp for details

The manufacture reserves the right to change the design or specifications without notice and without any obligation or liability whatsoever.





TIER 4 FINAL G-DRIVE ENGINE

ENGINE: Hyundai Infracore **FUEL:** Diesel

DRIVE ASSEMBLY:	December 11				
Configuration	Bare engine with mounting points				
Drive connections	SAE housing				
Configuration	G-Drive constant speed				
Drive shaft speed rpm	1800 or 3600 rpm				
ENGINE SPECIFICATION:					
Manufacturer	Hyundai Infracore				
Model	SU103N				
Emissions	Tier 4 - Final & Stage IIIB				
Crankshaft speed	1,800 or 3,600 rpm				
Engine Type & Combustion	Diesel Direct Injection				
Fuel Injection System	Bosch K-type mini pump				
Fuel Pressure	Mechanical centrifugal				
Aspiration	Naturally Aspirated				
Diesel fuel grade	EN590 : 2009 Diesel				
Cylinder Arrangement	In-line 3				
Displacement in ³ (liters)	61.45 (1.001)				
Bore and stroke ins (mm)	2.95 X 2.99 (75 X 76)				
Peak power hp (kW) @ 2800 rpm	24.0 (17.9)				
Cooling	Water Cooled				
Engine Control	Woodward APECS 4800				
Compression ratio	21.0:1				
Air cleaner type	Canister air cleaner				
Aftertreatment	Diesel Oxidation Catalyst DOC				
Ventilation System	Closed-Circuit Ventilation				
Max. back pressure - ins H₂O (kPA)	39.39 (9.8)				
Rotation viewed on flywheel	Counter clockwise				
Flywheel housing	SAE No.5				
Sound at 1m from engine block dB(A)	TBA				
Max. Exh. Temp at full load degrees ºF (ºC)	932 (500)				
Exhaust Gas Flow - ft³/min (m³/min)	54.0 (1.53) 3000rpm				
COOLING SYSTEM FOR OPERATING AT 120°F AMBIENT:					
Vater pump belt driven Centrifugal type					
Eng. Cooling air flow - ft³/min (m³/min)	51.9 (1.47) 3000rpm				

0.42 (1.6)

FUEL CONSUMPTION	Continuous / {Intermittent}			
100%	1.35 (5.0)/{1.51 (5.7)}			
75%	ТВА			
50%	ТВА			
25%	TBA			
LUBRICATION SYSTEM				
Oil pan capacity with filter - quarts	4.02 (3.8)			
Recommended lubricating oil grade	15W 40			
Oil pump	Gear type driven by crankshaft			
Oil consumption at full load	< 0.1% of fuel consumption			
Oil Filter	Full flow, cartridge type			
Oil pressure min. – psi (kPA)	35.5 (245)			
ELECTRICAL SYSTEM				
Battery charger	12 volt x 75A Alternator			
Starting motor	12 volt x 2.7kW			
Wet cell battery	Lead Acid			
Battery Capacity recommended	64AH, 950CCA			
Starting Aid	Glow Plugs			

16.4kWm 3600 rpm 10.0kWm 1800 rpm

DTP10-G Power Curves



ARRANGEMENT DRAWING & DIMENSIONS MODEL: DTP10-G G-Drive Diesel Engine

KEY DIMENSIONS AND WEIGHT with DOC + SCR					
Description	Key	Inches			
Height	Н	21.8			
Length	L	20.2			
Width	W	19.0			
Shaft Height	SH	TBA			
Dry Weight Ibs (Kg)		222 (101)			
DT Power Corp					

Engine Coolant Capacity gallons (Liters)

DT Power Corp 5820 NW 84th Avenue Miami, Florida 33166 Call: 305.592.9745

