HIPOWER®
A YANMAR COMPANY

MOBILE DIESEL GENERATOR SET

MODEL
HRIW-25 T4F

60Hz | MOBILE/PRIME/STANDBY POWER

20 kW | 1800RPM

VOLTAGE VAC	120/240V		120/208V		120/240V		277/480V		347/600V**	
RATING	Prime	Standby	Prime	Standby	Prime	Standby	Prime	Standby	Prime	Standby
PHASE	1		3		3		3		3	
PF	1.0		0.8		0.8		0.8		0.8	
HZ	60		60		60		60		60	
KW	19.9	21.8	20	22.0	20	22.0	20	22.0	N/A	N/A
KVA	19.9	21.8	25.0	28.0	25.0	28.0	25.0	28.0	N/A	N/A
AMPS	82.1	90.8	69	76	60	66	30	33	N/A	N/A
SKVA@30% VOLTAGE DIP	24		32		32		48		N/A	

DESCRIPTION

HIPOWER® Mobile generators are an efficient, reliable and versatile source of mobile electrical power. Designed to operate in the most extreme working conditions. All HIPOWER® Mobile Generators combine an innovative design and the use of high quality materials that provide the user with the most dependable power that you can rely on for non-stop power with easy to operate controls.

Powered by a radiator-cooled, industrial ISUZU Diesel engine, which meets current Environmental Protection Agency (EPA) TIER 4 Final non-road exhaust emission regulations, driving a single bearing, four-pole, three-phase alternator, with IP23 protection. The Prime Power kVA rating for generator set is given with a 105 degree °C alternator winding temperature rise.

HIPOWER® FEATURES AND BENEFITS

ISUZU Diesel Engine: Long-life, heavy-duty, 4-cycle, direct injection engine for economy of operation and maximum reliability and durability. Capable of full rated load acceptance in one step.

Cooling: Radiator with belt driven pusher fan.

Air Filter: Heavy-duty replaceable element air-cleaner.

Alternator: Single bearing, rotating field, self-excited, self-ventilated, 12-wire re-connectable, 60Hz brushless alternator with an Auxillary Winding for the AVR (Aux), with Class H insulation. Automatic voltage regulator (AVR) providing close voltage regulation and skVA starting capability for electric motor loads.

Certification: ISO 8528-5.

Fuel Tank: Environmentally friendly steel base welded sub-base fuel tank with internal filling system and 110% containment capability for any diesel fuel, coolant or engine oil spills. Easy access for maintenance activities.

Enclosure: Fully sound attenuated enclosure, fabricated in 14-gauge steel, powder coated with finish that exceeds 1400-hr salt spray test, curved edges, minimum outside fasteners and single point lift. Ample layer of durable foam sound insulating material placed all around the inside of the container, doors and ducting with metal retaining frames. It can be cleaned with high-pressure water and is oil and fire resistant. Vertical air discharge for quiet operation. Wide steel lockable access doors with rubber seals, easy access for maintenance and service activities, lift off die cast zinc textured black hinges, corrosion resistant hardware and fasteners.

Exhaust: Low noise, steel residential-type exhaust silencer with rain cap.

Fuel Filtration: Standard and secondary water separator with visible level on fuel filters.

Voltage Selector Switch: Three-position, manual voltage selector switch. Lockable in three positions for switching set between 120/240V single phase and 120/208 and 277/480V 3-phase.

Controls: Digital control panel with manual and automatic start and stop features. Many programmable automatic functions for local and remote controls with LED lights, tamper proof engine hour recorder.

Load Connections: Covered distribution panel for easy access to cable power outlets, receptacles, lugs and Camloks.

HIMOINSA POWER SYSTEMS, INC.
16600 South Theden Street, Olathe, KS 66062
Tel: 913 495 5557 | HIPOWERSYSTEMS.COM

Codes and Standards Compliances used where applicable

WORLDWIDE POWER PRODUCTS

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Fax 1-713-434-2394
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APPLICATION DATA

ENGINE SPECIFICATION	
Manufacturer	ISUZU
Model	4LE2T
EPA Certified	Tier 4 FINAL
Crankshaft Speed	1,800 rpm
Type	Diesel, 4-stroke
Injection	Direct
Aspiration	Turbocharged
Number of Cylinders	4
Cylinder Arrangement	In-line
Displacement CID (liters)	133 (2.2)
Bore & Stroke Ins (mm)	3.3 x 3.7 (85 x 96)
Nominal Power	40.2 hp
Cooling	Liquid
Governor	Electronic
Governor Regulation Class	ISO 8528 Part 1 Class G3
Frequency Regulation	Isochronous
Starting Motor & Alternator	12 volt
Compression Ratio	17.6:1
Air Cleaner Type	Heavy duty - single cartridge
Exhaust gas flow cu. ft./minute (cu.m. /minute)	191 (5.4)
Max. Exhaust temp at full load degrees °F (°C)	896 (480)
Max. Permissible back pressure ins H2O (kPA)	21.6 (7.5)

ALTERNATOR SPECIFICATION	
Manufacturer	STAMFORD
Model	S0L2P1 with AUX Winding
Voltages	120/208V | 277/480V | 120/240V
Alternator Type	Four pole, rotating field
Excitation System	Brushless, Aux winding-excited
Power Factor	0.8/1.0
Number of Leads	12 leads, reconnectable
Stator Pitch	2/3
Insulation	Class H
Windings – Temperature Rise	Class F (105/40° C)
Enclosure (IEC-34-S)	IP23
Bearing	Single, sealed
Coupling	Flexible disc
Amortisseur Windings	Full
Voltage Regulation – No load to full load with MX341 AVR	± 1%
TIF	<50
Radio Frequency Emissions Compliance	Meets requirements of most industrial and commercial applications
Line Harmonics	5% maximum

LUBRICATION SYSTEM	
Oil pan capacity - Gal. (L)	2.25 (8.39)
Oil pan capacity with filter - Gal. (L)	2.75 (10.3)
Oil cooler	Liquid
Recommended lubricating oil grade	SAE 10W-40 conventional DH4 (refer to owners manual)
Oil consumption at full load	< 0.1% of fuel consumption
Oil pressure – psi (kPA)	65 (450)

ENGINE ELECTRICAL SYSTEM	
Starting Motor Voltage	12 volt
Cold Cranking Amps - minimum	53 Amp
Battery Charging Alternator	110 Amp
Battery Capacity	650 Amps

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APPLICATION DATA

FUEL SYSTEM		
Recommended Fuel	# 2 - ULSD	
Fuel supply line, min. ID mm(in.)	9.5 - (3/8")	
Fuel return line,min. ID, mm (in.)	9.5 - (3/8")	
Max. Lift, fuel pump, type, m (ft)	TBD	
Fuel Filter	Secondary 8 Microns @ 98% Efficiency	
FUEL CONSUMPTION	**STANDBY POWER RATING**	**PRIME POWER RATING**
100% load – US gallons/hour	TBD	1.62 (6.12)
75% load - US gallons/hour	TBD	1.21 (4.58)
50% load - US gallons/hour	TBD	0.56 (2.11)
25% load - US gallons/hour (liters)	TBD	0.40 (1.52)
COOLING SYSTEM		
Engine cooling air flow - cu. ft./min (cu. m/min)	95.8 (2.71)	
Alternator cooling flow - cu. ft./min (cu. m/min)	251 (7.05)	
Total cooling air flow (engine + alternator + combustion) - cu. ft./min (cu. m/min)	1366 (38)	
Total cooling capacity - US gallons (liters)	3.8 (14.1)	
Max. Operating Temperature °F (°C)	122 (50)	

STANDARD ACCESSORIES	
• Air Filter Restriction Indicator	• Rheostat - Potentiometer on the front panel
• Leakage Detection Sensor	• Low Coolant Level Sensor
• Battery Switch	• Shunt Trip on MLCB
• Crankcase Ventilation Filter	• 3 Position Voltage Selector Switch
• Coolant Drain Extension	• Aux Winding Excitation on Alternator
• Distribution Panel 400A	• Leakage Detector Sensor
• Extended Maintenance Interval up to 500 Hrs.	• Leak Proof Tray
• Distribution power panel - (Receptacle only) NEMA 3R/IP67 0.09" Steel panel, black powder coated, weather proof rated; individual Square-D QOU branch breakers; 2 x 20A 125V NEMA5-20 GFCI duplex receptacles; 3 x 50A 125/250V CS6369 twist-lock receptacles & Lexan covers; 1 x15A 125V NEMA 5-15P Shore line connector.	

OPTIONAL ACCESSORIES	
• Battery Blanket	• Buck Transformer for Auxiliary 120 VAC Outlets
• Hydronic heater (5 kw)	• Water Jacket Heater
• Lojack transmitter, Installed	• Control Panel Heater
• 6 Amp - 10 Amp battery charger, 12/24V, UL Listed	• Oil Pan Heater
• 3-Way Fuel Valve	• 4 Position Voltage Selector Switch
• Distribution power panel - (Camloks connections) 1 set 400A single pin Camlocks rated 400A with snap covers; color coded Camlocks 3Ph - 5W black, red blue, white & green; pad lockable 1/4 turn door access with cable trap; auxiliary bus bars with mechanical lugs; 1 single barrel lug per phase; mechanical lugs up to 250MCM cable.	

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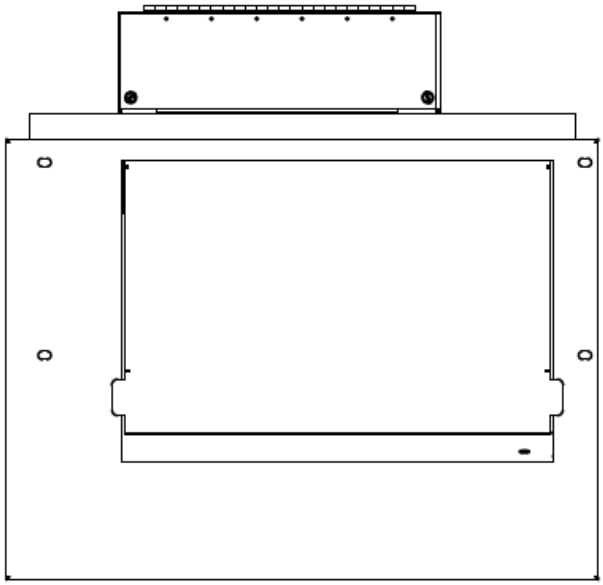
CONTROL SYSTEMS STANDARD FEATURES - Generator Digital Control Panel

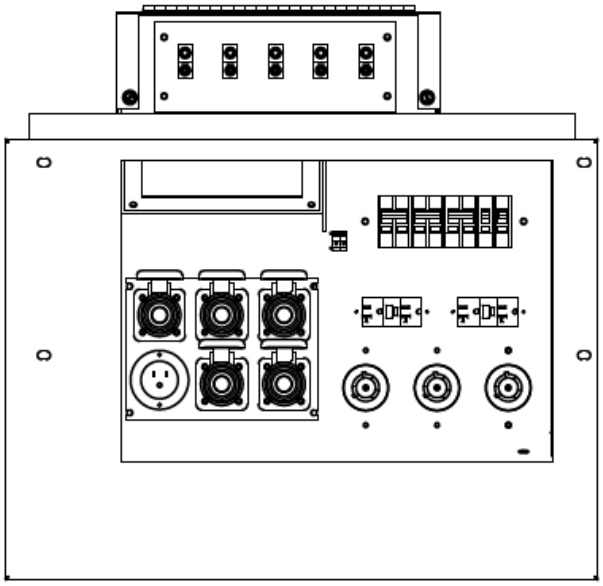
HIPOWER® COMAP IntelliLite MRS16 Control Panel: The IntelliLite MRS16 digital control panel is back-lit with icon LCD text display, and is PC configurable. IntelliLite MRS16 is a comprehensive controller for single gen-sets operating in Standby or Prime modes. Compact construction is optimized for these purposes and various modifications allow customers to select the optimum operation mode for a particular application.

Engine alarms included: High coolant temperature, low oil pressure, low coolant level, unexpected shutdown, low fuel level, stop failure, low battery voltage, battery charging alternator failure, over-speed, under-speed, start failure and emergency stop. Support of engines with ECU (J1939, Modbus and other proprietary interfaces); alarm codes displayed in text form.

Alternator alarms included: Overload, unbalanced voltage, over voltage, under voltage, over frequency, under frequency, short circuit, reverse power, and incorrect phase sequence.

DISTRIBUTION PANEL VIEW





* Camloks displayed are an optional feature.

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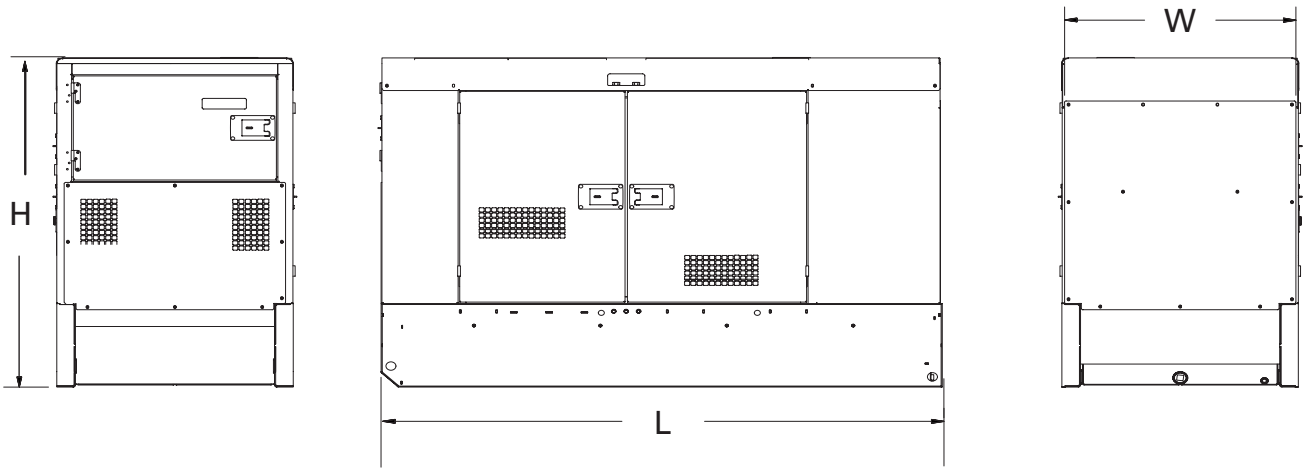
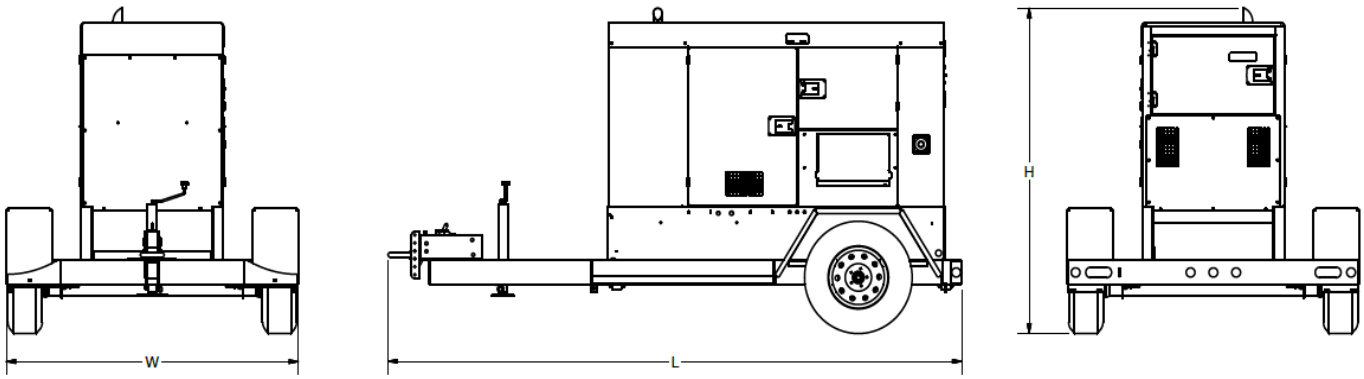
DIMENSIONS, WEIGHTS & SOUND LEVELS



CONFIGURATION	FUEL TANK DATA (BASE OPTION)		GENERATOR DATA *				
	RUN TIME HOURS	CAPACITY (GALS)	L = LENGTH	W = WIDTH	H = HEIGHT	WEIGHT LBS	DBA
Enclosed Set	45	80	88.6"	37.4"	62.1"	2,150	63

ENCLOSED SET WITH TRAILER



CONFIGURATION	FUEL TANK DATA (BASE OPTION)		GENERATOR DATA *				
	RUN TIME HOURS	CAPACITY (GALS)	L = LENGTH	W = WIDTH	H = HEIGHT	WEIGHT LBS	DBA
Enclosed Set with Trailer	45	80	146.0	70.0	80.0	2,578	63

* All measurements are approximate and for estimation purposes only. Weights are without fuel tank. Sound levels measured at 23ft (7m) and does not account for ambient site conditions.

Certified to CSA STD C22.2#100
Certified to CSA STD C22.2#14

REV 04-2025

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