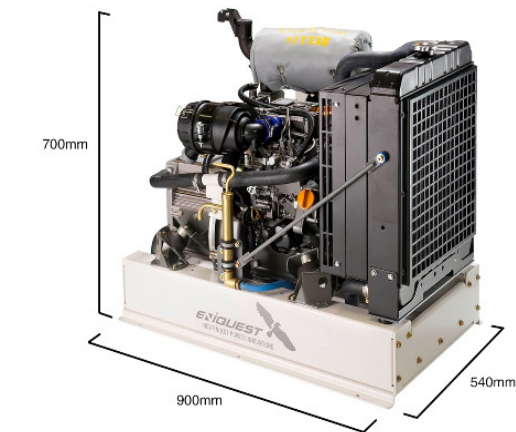


POWERMAKER DC DIESEL GENERATOR 10.0KW 48V

PowerMaker Ranger 10.0 (DC) Generator

PowerMaker Ranger 10.0 is a high-output direct current (DC) generator set that is designed to work with a storage battery bank.

Compact, quiet and virtually unbreakable, PowerMaker Ranger is built tough for any environment or application. It is ideal for plant battery charging, mobile mining, mine site communications, and hybrid power systems. The PowerMaker Ranger 10.0 DC diesel generator has remarkable fuel economy with using 22% less fuel than any other conventional engine and uses 44% less fuel to charge your batteries.



Specifications

Portable	Yes
Operation	Automatic
Power	10.0kW @ 56V
Voltage	48V DC
Fuel	Diesel
Dimensions (mm)	1240(L) x 625(W) x 795(H)
Weight	235kg

Features

- Quiet and compact
- Remarkable fuel economy
- Variable engine speed
- Water-cooled low-speed engine
- Direct-drive water-cooled alternator
- Charges any battery type
- Robust design
- Easy maintenance
- 2-year limited warranty

Ideal for:

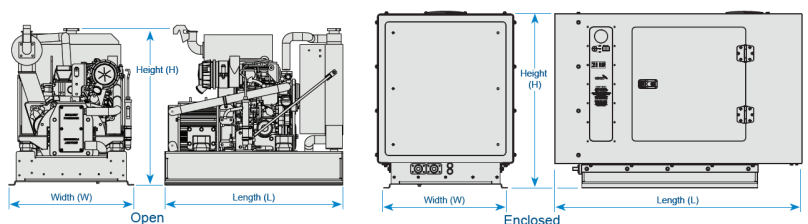
- hybrid power plants
- solar power backup
- telecommunications

Specifications

POWERMAKER Ranger	Ranger 5.0	Ranger 6.0	Ranger 8.0	Ranger 10.0
Model	Ranger 5.0	Ranger 6.0	Ranger 8.0	Ranger 10.0
Output power - Continuous*	5.0kW @ 29V DC	6.0kW @ 58.0V DC	8.0kW @ 29.0V DC	10.0kW @ 58.0V DC
Nominal output voltage	24V DC	48V DC	24V DC	48V DC
Maximum battery charging amps*	175A	105A	280A	178A
Bulk charge current (programmable)	Up to 175A	Up to 105A	Up to 280A	Up to 178A
Absorption charge voltage (programmable)	Up to 29V	Up to 58V	Up to 29V	Up to 58V
Battery charging typology	Two stage, constant current, constant voltage			
Engine				
Engine make/model	Yanmar 2TNV70		Yanmar 3TNV70	
Engine type	Diesel, naturally aspirated, indirect injected, industrial			
Engine displacement	570cc		854cc	
Number of cylinders	2		3	
Operating speed (automatic variable)	1900 to 2500 RPM	1900 to 2500 RPM	1900 to 2500 RPM	1900 to 2600 RPM
Cooling method	Water cooled with radiator and belt-driven cooling fan			
Fuel type	Automotive diesel			
Fuel consumption at full load	1.74 litres/hour	2.1 litres/hour	2.8 litres/hour	3.5 litres/hour
Fuel lift pump	Electric			
Maximum fuel suction capability	1.6 metres vertical			
Starting	12V (optional 24V)			
Lube oil type	SAE15W40 in ambients from -15°C to 40°C			
Lube oil capacity	1.8 litres	1.8 litres	2.8 litres	2.8 litres
Crank case oil evacuation	Drain valve (hand pump optional)			
Service intervals	250 hours (500 hours optional)			
Alternator				
Alternator make	Enquest SF5.6		Enquest SF8.0	
Alternator type	Permanent magnet, brushless, with bearingless rotor			
Enclosure	Totally enclosed			
Windings connection	Three phase star	Three phase delta	Three phase star	Three phase delta
Voltage control	Variable engine speed			
Voltage control accuracy	Within +/-1%			
Rectifier type	Full wave dual bridge	Full wave bridge	Full wave dual bridge	Full wave bridge
General				
Enclosure type (enclosed versions only)	Noise reducing, fully enclosed, fully banded, in powder coated aluminium, with integrated multi chamber exhaust silencer			
Noise emission @ full power @ 7 metres	61dBA enclosed; 67dBA open		63dBA enclosed; 67dBA open	
Vibration isolation	High isolation angled at 45° for movement restraint			
Control type	Digital signal processing (DSP) based with engine protection			
Dimensions (open) - L x W x H mm	810 x 570 x 710	810 x 570 x 710	900 x 540 x 700	900 x 540 x 700
Dimensions (enclosed) - L x W x H mm	1130 x 625 x 795	1130 x 625 x 795	1240 x 625 x 795	1240 x 625 x 795
Weight (open/enclosed)	175/205kg	175/205kg	195/235kg	195/235kg
Operating environment				
Normal operating temperature range	-15°C to +54°C			
Minimum operating temperature	-40°C with optional sequenced temperature starting			
Derating for temperature using current limit	3% for every 10°C above 27°C			
Normal operating altitude	Sea Level to 3000m			
Maximum operating altitude	5000m with optional forced induction			
Derating for altitude	1.3% for every 100m above sea level			

* @ 27°C, 750mmHg, 60% relative humidity

These specifications are subject to change without notice.



Specifications subject to change without notice.