

7.0kW, 230V, 50Hz Generator with RsEK

Item # 19-0401006

Built for the Austere

The Solar Stik 7.0 kW Remote-start enabled generator is a ruggedized, commercial-grade generator built to withstand the rigors of worldwide deployment. Constructed with purpose in mind, it provides reliable power in remote, austere locations where punishing environmental conditions and minimal logistical support are critical factors. This smart generator is a completely integrated solution built to handle abuse. It has built in protections for impact, vibrations, heat, particulates (dust and foreign object debris), moisture and UV irradiation. The engine, generator, and cooling system ride on heavy-duty shock absorbers, which minimize noise and vibration. The sub-frame, cavernous fuel tank (minimizes refueling cycles) and chassis are constructed with high-quality, powder-coated steel. The mechanical system is environmentally sealed and hardened against the elements. These features ensure the generator is at-the-ready for the rigors of transport to a permanent location or mounted on a mobile platform that routinely moves over rough terrain.

Reliable Anywhere

The liquid-cooled, fuel-efficient Yanmar diesel engine is built for long service life with minimal maintenance during rugged deployment. The engine has been in service for years throughout multiple industries, meaning parts and service are available in the most remote areas on the globe.

Hybrid-Power-System Ready

This generator is designed for optimal use in an intelligent power system. The built in user interface provides manual and remote Auto-Generator Start / Stop (AGS) operation at the push of a button, providing on-demand power or automatic operation when connected to any Solar Stik 3-6kW Hybrid Power System. The genset quietly and seamlessly powers loads and recharges batteries when operating in a Hybrid Power System architecture. Generating a robust 7,200 W (peak) 230 VAC power output, the genset easily handles spikes or swings in power demand that are often associated with hybrid power applications.

Power Up Worry Free

The genset provides users the confidence to operate anywhere in the world with a compact footprint and decreased logistical burden. With the integrated generator running smoothly even in the most severe applications, operators can focus on their mission free from the burden of unreliable power.



Design

- Compact footprint with consolidated "chassis" design
- 51 gallon steel diesel fuel tank
- Industrial muffler with advanced sound-deadening shield (75db under load)

Operation

- Liquid cooling for operation in extreme heat
- Heavy duty air cleaner with advanced particulate capture and sediment trap
- Rubber shock-absorbing mounting system to reduce vibration and noise
- Optima "high heat" AGM Battery and secure-lock rack with cables

User Interface

- Deep Sea 3110 controller, User Interface, and Remotestart Enabling Kit (RsEK)
- (1) 230 VAC, 30 A, (L6-30R) Output
- 10 Pin, 22AWG Connection (Direct connection to PRO-Verter Gen Comm Port)
- Auto-Generator Start (AGS) Capability

Power Output

• 7kW at 230 VAC





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General

AC Power Generation AC Operating Voltage Rated Current

230 VAC, 50 Hz 30 A

Construction

Material Coatings

Shock & Vibration Mounts

Lifting points Mounting points Steel (primary material) Powder Coated (choice of color)

7.2 kW Peak, 6.9 kW Continuous

Heavy Duty Rubber Feet

4 (with Spreader Bar) or Slings with Top Cover Removed

4 Flanges at base

User Interface

DSE 3110 Control Panel

AUTO-START/STOP

MANUAL Start Illuminated LCD

Status Icons to indicate operational status

LED and LCD alarm indication Generator AC voltage display Generator frequency display Battery voltage display Engine RPM display Hobbs meter (hours)

Yanmar 3TNV80F-NGGE

Comprehensive shutdown during fault conditions

Multiple engine parameters monitored

1st time - 50 hours, Subsequent 250 hours

Liquid Cooled, High Ambient Radiator

Single - Alternator, Water Pump, Fan

Industrial muffler, mounted vertical with environmental cap

Two-stage - Centrifugal Particle Separator & Heavy Duty Filter

IP65 rating

indirect Injection

~15,000 hours

Natural

<TBD>

1500 RPM

Engine

Engine model Cylinders

Combustion Type

PMCS Intervals

Service Life (TBO) Aspiration

Exhaust Cooling

Air Filters

Oil Filter

Belt Rotation Speed

Max Operating Incline

Starting Battery

Battery Charging Acoustic Noise

30° for 10 min 25° continuous 12 V Electric Starter Type

12 V, OPTIMA AGM, 450 Cold Cranking Amps

Regulated 14 V, 20 A (for AGM) 75 db at distance of 7 meters (23ft)

Fuel

Capacity Fuel Type Consumption

Fuel Filters Fuel Pump Type Fuel Gauge

51 US Gal Diesel

.25 Gal/hr @ 50% load .50 Gal/hr @ 100% load Inline, Primary and Secondary

Electric 12 V

Mechanical, Tank Mounted





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Alternators

AC Mecc Alte ecp28C-2S

AC Type Revolving fields, Four-pole, Single-phase

Protection class IP2

PMCS intervals Cleaning - 400 Hours; Maintenance - 2500 Hours

DC Baldor

Connections

Output (1) L6-30R, HBL2620SW

Grounding Terminal Lug

Gen Comm Port (For connection to PRO-Verter)

Safety Circuits

Engine Oil Pressure Shut Down

Engine Coolant Temperature Shut Down

Emergency STOP PUSH Button

AC Breaker Generator Main Switch AC Circuit Breaker, 40 A DPST

Environmental

Max Operating Wind

• Average steady state 50 mph (22.4 m/s) with provided ground securing

• Gust 60 mph (26.8 m/s) with provided ground securing

• Solar Array includes stabilization (ground securing) required to operate in the wind

environments mentioned above

Max Teardown Wind Average 25 mph (11.2 m/s) with provided ground secruring

Weights and Dimensions (L x W x H)

Weight 960 lb (435.5 kg) - <TBD>

Dimensions 24 x 50 x 52 in (61 x 127 x 132 cm)

Compliance

Built and designed to

comply with • MIL STD 1474

• MIL-STD-810G Part Three – Sand and Dust

Temperature

Operating Temperature $-20 \,^{\circ}\text{F}$ to $+131 \,^{\circ}\text{F}$ (-28.9 $^{\circ}\text{C}$ to $+55 \,^{\circ}\text{C}$) Storage Temperature $-4 \,^{\circ}\text{F}$ to $+149 \,^{\circ}\text{F}$ (-20 $^{\circ}\text{C}$ to $+65 \,^{\circ}\text{C}$)

NOTE: The generator can be stored at extreme temperatures by following weatherization and maintenance procedures

Warranty <TBD>

