

# VOLTstack® Power Stations

BY Portable Electric

### The Future of Power, Today

Portable Electric's VOLTstack® power stations are the solution you didn't know you needed. Powerful and built to industry standard, the VOLTstack® is the revolutionary clean energy alternative to traditional gas and diesel generators.

The most robust power station on the market, the VOLTstack® delivers reliable, instant, high torque power the moment you pull the trigger. With a lithium ion battery at its core, the VOLTstack® is a silent, emissions-free power solution that reduces cost and refocuses labour.



#### BENEFITS OF WORKING WITH VOLTSTACK®:



#### **Reduce Costs**

- Instant, high torque power, eliminating lag time and saving fuel costs
- Save \$20 per unit, per shift



#### **Power Anywhere**

- Use wherever and whenever you need it. Set it and forget it.
- Handles peak loads of 5kW+



#### **Increased Safety**

- Zero generator noise ensures better communication on the worksite
- Zero emissions means no health issues from toxic fumes



## SUCCESSFUL USE CASES WITHIN CONSTRUCTION INCLUDE:

#### **Labour & Logistics**

Better cable management

Faster workflow with instant torque & power

Enables early morning starts & setups

Late night finishes

Better communication

No fuel costs, no need for fuel runs

Use as a grid-booster when grid power is dubious

#### Health & Safety

Eliminates health issues from generator-produced particulates

Use in confined spaces

Power overnight for asbestos fans

#### **Equipment**

Hand tools

Drills

Pumps

Riveters

Saws

Pressure Washers

Air Conditioning

#### **Security**

LED lighting at night

LED lamps Security

Charging



#### **Data Analytics**

View your cost savings and GHG reductions in real time



#### **Better Workflow**

- Streamlined cable management and faster work with portable power
- Use where traditional generators can't go; enclosed spaces and close to personnel



#### **Reduce Emissions**

• Negate 55kg of CO<sub>2</sub> per 8 hour shift, with just two power stations



"These things were fantastic! I would not switch back to diesel for the applications for this, that or the other. I've already cut my PO for 10 units."

- Joe Anderson, Site Manager

"So awesome. We used these at Coachella this year. 100 thumbs up!"

- Ken Deans, Logistics Director

"I took them on my standard duties and they worked great. They did the job better than diesel. Plugging them in was a breeze."

- Mike Johnson, Site Supervisor

### Portable Electric's VOLTstack® Equipment Run Times

#### **Understanding DUTY CYCLE**

Unlike traditional generators that provide power as long as they're burning fuel, the VOLTstack® delivers instant power on demand only when activated. It's a "pull" from the VOLTstack®, rather than a "push" from a traditional generator. Therefore when operating intermittent use tools, such as a circular saw, an estimate can be made for how often that tool is actuated; i.e. a tool's "duty cycle". This duty cycle estimate is made based on DEWALT tool use data, divided into 15 minute, 30 minute, and 45 minute per hour categories.

nour categories.					Control Control
		CONSTANT LOAD		DUTY CYCLE	
		2k	5k	2k	5k
	Sattery (kWh)	2.8	5.6	2.8	5.6
S	ystem Eff (%)	90%	90%	90%	90%
Battery Capacity Usable (kWh)		2.52	5.04	2.52	5.04
Max Continuous Load (W) Surge 3 Sec (W)		2400 4500	4800 5800	2400 4500	4800 5800
		^			
DEVICE	Power (W)	TIME (HH:MM)	TIME (HH:MM)	TIME (HH:MM)	TIME (HH:MM)
Battery Charger - 15 amp	380	6:30	13:00	N/A	N/A
Dehumidifier	650	4:00	7:30	N/A	N/A
Fan, Circulator - 20"t	106	24:00	47:30	N/A	N/A
Humidifier - 13 gallon	175	14:30	29:00	N/A	N/A
Forced Air Propane Heater - 85,000 BTU	500	5:00	10:00	N/A	N/A
Work Light - Quartz-Halogen	1000	2:30	5:00	N/A	N/A
Work Light - LED	96	26:00	52:30	N/A	N/A
Air Conditioning Unit	1000	2:30	5:00	N/A	N/A
Box Fan	200	12:30	25:00	N/A	N/A
Cell Phone	6	420:00	840:00	N/A	N/A
LED TV - 46»	200	12:30	25:00	N/A	N/A
Laptop	250	10:00	20:00	N/A	N/A
Computer	150	17:00	33:30	N/A	N/A
Radio	50	50:30	101:00	N/A	N/A
LOW LOAD DEVICES		e manta a manta a manta a		15 Mins/Hr Use	15 Mins/Hr Use
Air Compressor - 0.5 HP	1000	2:30	5:00	10:00	20:00
Air Compressor - 1.5 HP	2200	1:00	2:30	4:00	9:00
Band Saw - 14"	1100	2:30	4:30	9:00	18:00
Bench Grinder - 8"	1400	2:00	3:30	4:00	9:00
Circular Saw, Heavy Duty - 8.25"	1800	1:30	3:00	5:30	11:00
Electric Line Trimmer - Heavy Duty 12	500	5:00	10:00	20:00	40:00
Reciprocating Saw	960	2:30	5:00	10:30	20:30
Microwave Oven (625 Watt)	625	4:00	8:00	16:00	32:00
MEDIUM LOAD DEVICES				30 Mins/Hr Use	30 Mins/Hr Use
Belt Sander	1200	2:00	4:12	4:00	8:00
Electric Chain Saw - 14", 2 HP	1100	2:30	4:30	4:30	9:00
Hand Drill - 0.5"	600	4:00	8:24	8:30	16:30
High Pressure Washer - 1 HP	1200	2:00	4:12	4:00	8:00
HIGH LOAD DEVICES				45 Mins/Hr Use	45 Mins/Hr Use



## VOLTstack® 2k Unit

**SPECIFICATIONS** 

#### **RATED OUTPUT**

Continuous output: 2,400W Peak power (3sec): 4,500W

#### **AC OUTPUT**

120VAC Pure Sine Wave (THD < 3%) 60 Hz, Single Phase, 20A Continuous

#### **CHARGING PORTS**

AC Input: 1 x 125VAC 20 Amp receptacle (NEMA 5-15P type) Solar Input: 2 x SUNstack<sup>™</sup> Connectors

#### **CHARGING TIMES**

1 x AC Input (120VAC, 1,200W): 2.5 hours Solar MPPT Input (360W): 7.5 hours\* Combined Input (AC + Solar): 1.75 hours\* \*Under optimal solar conditions

#### **BOX MECHANICAL SPECS**

Weight: 190 lb / 86 kg

Four wheel (two stationary, two swivel) 4" neoprene casters

Dimension of Unit incl. handles (L  $\times$  W  $\times$  H): 31"  $\times$  21"  $\times$  23" / 790mm  $\times$  550mm  $\times$  580mm

#### **SAFETY**

Non-Combustible Aluminum Enclosure

Conforms to UL STD 1640

Certified to CSA 22.2 # 14

Recommended storage temperature: 10°C - 30°C



#### **STORAGE**

2.8 kWh nominal

Battery Type: Lithium-Ion (LiFePo<sub>4</sub>) Lifecycles: 4,000 cycles to 80% capacity\*

\*Full charge/discharge at 1C, 25°C

#### **OUTPUT CONNECTORS**

2 x 125VAC, 20A Weatherproof Receptacles (NEMA 5-20R) 2 x 5 VDC, 2.4A USB Receptacles

#### **USER INTERFACE**

Surrounding protective handles with room to grip

Easy to use interface with 1-touch operating feature

Battery monitor with state of charge, wattage in/out and operating & charging times

Resettable Input & Output Breakers

#### **OPERATING CONDITIONS**

Operating temperature (discharging): -20°C up to 50°C

Operating temperature (charging): 0°C up to 50°C N.B. Power output derates by 1.8% per °C above 40°C

#### **PROTECTION**

Built in overcharge / over-discharge protection

Output protected against short circuit, overload, overtemperature & over-voltage

Master System On/Off for Storage & Shipping

#### **CARBON OFFSET EQUIVALENT**

Offsets 10 kg of CO<sub>2</sub>e for 8 hours operation

## VOLTstack® 5k Unit

#### **SPECIFICATIONS**



#### **RATED OUTPUT**

Continuous output: 4,800W Peak power (3sec): 5,800W

#### **AC OUTPUT**

120VAC Pure Sine Wave (THD < 3%) 60 Hz, Single Phase, 40A Continuous

#### **CHARGING PORTS**

AC Input: 2 x 125 VAC 20 Amp receptacle (NEMA 5-15P type) Solar Input: 2 x SUNstack<sup>™</sup> Connectors

#### **CHARGING TIMES**

1 x AC Input (120VAC, 1,200W): 5 hours 2 x AC Input (120VAC, 2,400W): 2.5 hours Solar MPPT Input (360W): 15.5 hours\* Combined Input (AC + Solar): 2 hours\* \*Under optimal solar conditions

#### **BOX MECHANICAL SPECS**

Weight: 330 lb / 150 kg

Four wheel (two stationary, two swivel) 5" neoprene casters

Dimension of Unit incl. handles (L  $\times$  W  $\times$  H): 32"  $\times$  24"  $\times$  30" / 810mm  $\times$  600mm  $\times$  750mm

#### **SAFETY**

Non-Combustible Aluminum Enclosure

Conforms to UL STD 1640

Certified to CSA 22.2 # 14

Recommended storage temperature: 10°C - 30°C



#### 5.6 kWh nominal

Battery Type: Lithium-Ion (LiFePo<sub>4</sub>) Lifecycles: 4,000 cycles to 80% capacity\* \*Full charge/discharge at 1C, 25°C

#### **OUTPUT CONNECTORS**

 $2\times125\text{VAC},\,20\text{A}$  Weatherproof Receptacles (NEMA 5-20R)  $2\times5$  VDC, 2.4A USB Receptacles

#### **USER INTERFACE**

Surrounding protective handles with room to grip

Easy to use interface with 1-touch operating feature

Battery monitor with state of charge, wattage in/out and operating & charging times

Resettable Input & Output Breakers

#### **OPERATING CONDITIONS**

Operating temperature (discharging): -20°C up to 50°C

Operating temperature (charging): 0°C up to 50°C N.B. Power output derates by 1.8% per °C above 40°C

#### **PROTECTION**

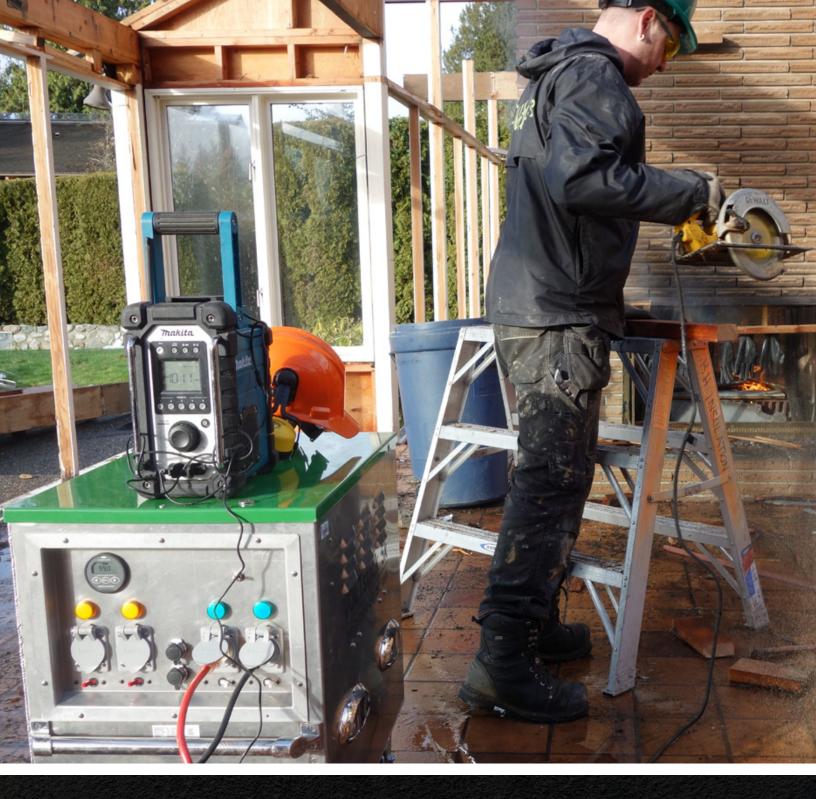
Built in overcharge / over-discharge protection

Output protected against short circuit, overload, overtemperature & over-voltage

Master System On/Off for Storage & Shipping

#### **CARBON OFFSET EQUIVALENT**

Offsets 15 kg of CO<sub>2</sub>e for 8 hours operation



## Portable Electric\*

THE FUTURE OF POWER.™

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