



VOLTstack[®] Power Stations

BY **Portable**Electric[®]



The Future of Power™

Portable Electric's VOLTstack® power stations revolutionize the way film productions are powered. With a proven track record on sets of all sizes across the world, VOLTstack® has brought clean, reliable power to series productions like Disney Plus' *The Mandalorian*, HBO's *Silicon Valley* and Netflix's *The Crown*, as well as feature productions like Fox's *Deadpool*, Universal's *Fast & Furious 9* and MGM Studios' *No Time To Die*, to name a few.

An incredible tool in any gaffer's arsenal, the VOLTstack® delivers silent, emissions-free power that dramatically reduces cost. Zero cabling, zero noise and zero risk of property damage, just reliable power when you want it, where you need it. All guided by data-driven insights from our wireless, real-time energy management and GPS systems.

VOLTstack® power stations allow you to film in the most challenging environments, including noise and emissions-sensitive locations, remote sites and confined spaces. So you can design your set around your vision, not your power needs.



SUCCESSFUL USE CASES WITHIN THE FILM INDUSTRY INCLUDE:

Lighting/Electrics

A tool that allows you to do more with less

- Isolated power demands
- Noise and emissions-sensitive locations
- Reduces cable demand and refocuses manpower
- Location background lighting
- Battery charging

Locations

- Silent power for noise-restrictive locations
- Emissions-free power
- Further solutions that foster good relationships with public
- Overnight power needs
- Problem solvers that provide quick, efficient solutions

Camera

- Battery charging
- Technocrane
- Dollies
- Digital Imaging Tech
- 360° panning shots requiring no visible cable

Catering / Crafty / First Aid / Hair & Make Up

- 2k and 5k units support early morning setups where noise restrictions apply, and 20k units are perfect for all-day power needs
- Pre and post noise by-law applications
- Overnight power – fridges

Environmental Safety

- Reducing likelihood of required Fire Marshal presence
- Permitting for dry areas like ranches, wildfire country & parks
- Helps with spot checks & random inspections

Lights

- ARRI Skypanels
- Kino LED
- Kino Fluorescent
- LitePanels
- Cineo products

Set Dec

- Tools
- LED work lights
- Battery charging
- Laptops and electronics

Sound

- Battery recharging
- Sound mixer

Video Village

- Reliable power in difficult locations
- Powers monitors, WiFi, communications & battery charging

Construction

- Tools
- LED work lights
- Batteries

Other Applications

- Confined spaces
 - Moving vehicles (buses, cars, boats)
 - Elevators
 - Underground parking lots
 - Indoor spaces
 - Top floor shoots in high-rise buildings
- Environmentally sensitive areas
- Hospitals

Portable Electric's VOLTstack® Equipment Run Times

		2k	5k	20k	20k
				N.A. Split Phase	N.A. Three Phase
Battery (kWh)		2.8	5.6	80	80
Max Continuous Load (W)		2400	4800	20400	17200
Max Surge Rating 3 Sec (W)		4500	5800	30000	30000
Device	Power (W)	Time (hh:mm)	Time (hh:mm)	Time (hh:mm)	Time (hh:mm)
LED					
Cineo Matchstick	18	140:00	280:00	4444:30	4444:30
Cineo Matchbox	13	193:30	387:30	6154:00	6154:00
Cineo HS2	500	5:00	10:00	160:00	160:00
1x1 Astra LitePanel E Daylight/Bi-Color	30	84:00	168:00	2666:30	2666:30
1x1 Astra LitePanel EP Daylight/Bi-Color	55	45:30	91:30	1454:30	1454:30
1x1 Astra LitePanel Daylight/Bi-Color/Tungsten	110	23:00	45:30	727:00	727:00
Kino Celeb 200	100	25:00	50:00	800:00	800:00
Kino Celeb 250	145	17:00	34:30	552:00	552:00
Kino Celeb 400	210	12:00	24:00	381:00	381:00
Kino Celeb 450	255	10:00	19:30	314:00	314:00
Kino Celeb 850	575	4:00	8:30	139:00	139:00
Kino 800 mA Fluorescent	75	33:30	67:00	1066:30	1066:30
Kino Select 30/20	150	16:30	33:30	533:30	533:30
Arri Skypanel S-30C	200	12:30	25:00	400:00	400:00
Arri Skypanel S-60C	420	6:00	12:00	190:30	190:30
Arri Skypanel S-120C	400	6:00	12:30	200:00	200:00
Arri Skypanel S-360C	1500	1:30	3:00	53:30	53:30
LED Light Sheet (18 x 9 segments)	100	25:00	50:00	800:00	800:00
LED Strip Light (5m Reel)	13	193:30	387:30	6154:00	6154:00
CAMERA					
DIT Equipment	600	4:00	8:00	133:30	133:30
Video Village (Monitors/sound/charging)	800	3:00	6:00	100:00	100:00
Technocrane, Normal usage 20amp (continuous)	425	6:00	12:00	188:00	188:00
Fisher / Peewee Dolly (7 lifts per charge continuous)	425	6:00	12:00	188:00	188:00
TUNGSTEN					
150W pepper	150	16:30	33:30	533:30	533:30
300W Fresnel - Mole/Arri Brands	300	8:00	16:30	266:30	266:30
650W Fresnel (Tweenie)	650	4:00	7:30	123:00	123:00
1000W Fresnel	1000	2:30	5:00	80:00	80:00
2000W Arri T2	2000	1:00	2:30	40:00	40:00
2000W OpenFace (Blonde, Bluebell)	2000	1:00	2:30	40:00	40:00
5000W Arri T5	5000	N/A	N/A	16:00	16:00
10KW	10000	N/A	N/A	8:00	N/A
12KW Arri T12	12000	N/A	N/A	6:30	N/A
20KW Arri Mole Richardson	20000	N/A	N/A	4:00	N/A
24KW Arri T24	24000	N/A	N/A	N/A	N/A
HMI (BALLASTS)					
M8	800	3:00	6:00	100:00	100:00
M18	1821	1:00	2:30	44:00	44:00
M40	4000	N/A	1:00	20:00	20:00
M90	9000	N/A	N/A	9:00	9:00
ARRIMax 18	18000	N/A	N/A	4:30	N/A
18KW Silver Bullet Fresnel	18000	N/A	N/A	4:30	N/A



VOLTstack 5k
by Portable Electric

MovieBird



VOLTstack® 5k

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 125VAC 20 Amp receptacle (NEMA 5-15P type)
Solar Input: 4 x SUNstack™ Connectors (200W each)

CHARGING TIMES (0 TO 90% SOC)

1 x AC Input (120VAC, 1,200W): 5 hours
2 x AC Input (120VAC, 2,400W): 2.5 hours
Solar MPPT Input (720W): 8 hours*
Combined Input (AC + Solar): 2 hours*

*Under optimal solar conditions

BOX MECHANICAL SPECS

Weight: 330 lbs / 150 kg
Four wheel (two stationary, two swivel) 5" neoprene casters
Dimensions of Unit incl. handles (L x W x H):
32" x 24" x 30" / 810mm x 600mm x 750mm

SAFETY

Non-Combustible Aluminum Enclosure
Conforms to UL STD 1640
Certified to CSA 22.2 # 14
Recommended storage temperature: 10°C - 30°C

STORAGE

5.6 kWh nominal
Battery Type: Lithium-Ion (LiFePo₄)
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 and charging times
- Resettable Input and 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 and over-voltage
- Master System On/Off for Storage and Shipping

CARBON OFFSET EQUIVALENT

Offsets 20 kg of CO₂e for 8 hours operation*
*Assumes ¼ load output and low CO₂e charging source





VOLTstack® 20k

SPECIFICATIONS

OUTPUT POWER

Nominal Output Power: 22kVA / 18kW
Max Surge Rating: 27.5kVA / 22.5kW (15 seconds)

OUTPUT VOLTAGE

120/240 VAC Split-phase, Pure Sine Wave (THD < 3%),
60 Hz, 75A Continuous (94A 15s Surge)

CHARGING TIMES (0 TO 90% SOC)

AC Input (Single Phase 240V 80A): 4 hours
AC Input (Single Phase 208-240V 40A): 10 hours
AC Input (Single Phase 120V 15A): Trickle Charge
EVSE Level 2 Input 40A: 10 hours
Solar MPPT Input (9600W): 7 hours*

*Under optimal solar conditions

OPERATING TEMPERATURE

Operating temperature (discharging): -10°C up to 50°C*
Operating temperature (charging): 0°C up to 50°C*
Optional low temperature discharging: -30°C

*Full rated power up to 40°C. Power derated linearly at 2.5%/°C from 40°C to 50°C

MECHANICAL SPECS

Dimensions (W x L x H): 48" x 81" x 60"
Weight: 4,300 lbs / 1950 kg
Outdoor rated enclosure (Designed to meet NEMA 3S)

SAFETY

UL 1973, UL 2271, & IEC 62133 Certified Battery
UL Certified Inverter and Solar MPPT
Special Inspection SPE 1000 CSA

ENERGY STORAGE

60 kWh nominal
Battery Type: Lithium-Ion (LiFePo₄)
Lifecycles: 4,000 cycles to 80% capacity*
*Full charge/discharge at 1C, 25°C

OUTPUT CONNECTORS

2 x 120/240V 75A 4-wire Camlock outlet
4 x 120V 20A GFCI receptacles (NEMA 5-20R type)
1 x 120V 30A twist-lock (NEMA L5-30R)
2 x 120/240V 30A 4-wire twist-lock (NEMA L14-30R)
1 x 120V Bates 60A Stage Pin connector
1 x 120V Bates 100A Stage Pin connector

CHARGING PORTS

AC Input

1 x 120/240VAC 80A 4-wire Camlock inlet
1 x 120/208-240VAC 50A 4-wire twist-lock (CS6375M2)
1 x EVSE Level 2 inlet 40A (SAE J1772)
1 x 120V 15A inlet receptacle (NEMA 5-15P)

Solar Input

6 x SUNstack™ Connectors

USER INTERFACE

- 7" outdoor-rated LCD touch screen with state of charge, power in/out, operating & charging times
- App-enabled wireless monitoring platform for real-time data, analytics, & GPS
- Resettable Input and Output Breakers

CARBON OFFSET EQUIVALENT

Offsets 90 kg of CO₂e for 8 hours operation*
*Assumes ½ load output and low CO₂e charging source



VOLTstack® 30k

SPECIFICATIONS

OUTPUT POWER

Nominal Output Power: 33kVA / 27kW
Max Surge Rating: 41kVA / 34kW (15 seconds)

OUTPUT VOLTAGE

120/208 VAC Three Phase, Pure Sine Wave (THD < 3%),
60 Hz, 75A Continuous (94A 15s Surge)

CHARGING TIMES (0 TO 90% SOC)

AC Input (Three Phase 208V 80A): 3.5 hours
AC Input (Single Phase 208-240V 40A): 12 hours
AC Input (Single Phase 120V 15A): Trickle Charge
EVSE Level 2 Input 40A: 12 hours
Solar MPPT Input (9600W): 8 hours*

*Under optimal solar conditions

OPERATING TEMPERATURE

Operating temperature (discharging): -10°C up to 50°C*
Operating temperature (charging): 0°C up to 50°C*
Optional low temperature discharging: -30°C
*Full rated power up to 32°C. Power derated linearly at 2.8%/°C from 32°C to 50°C

MECHANICAL SPECS

Dimensions (W x L x H): 48" x 81" x 60"
Weight: 4,850 lbs / 2,200 kg
Outdoor rated enclosure (Designed to meet NEMA 3S)

SAFETY

UL 1973, UL 2271, & IEC 62133 Certified Battery
UL Certified Inverter and Solar MPPT
Special Inspection SPE 1000 CSA

ENERGY STORAGE

80 kWh nominal
Battery Type: Lithium-Ion (LiFePo₄)
Lifecycles: 4,000 cycles to 80% capacity*
*Full charge/discharge at 1C, 25°C

OUTPUT CONNECTORS

2 x 120/208V 75A 5-wire Camlock outlet
4 x 120V 20A GFCI receptacles (NEMA 5-20R type)
1 x 120V 30A twist-lock (NEMA L5-30R)
2 x 120/208V 30A 4-wire twist-lock (NEMA L14-30R)
1 x 120V Bates 60A Stage Pin connector
1 x 120V Bates 100A Stage Pin connector

CHARGING PORTS

AC Input

1 x 120/240VAC 80A 5-wire Camlock inlet
1 x 120/208-240VAC 50A 4-wire twist-lock (CS6375M2)
1 x EVSE Level 2 inlet 40A (SAE J1772)
1 x 120V 15A inlet receptacle (NEMA 5-15P)

Solar Input

6 x SUNstack™ Connectors

USER INTERFACE

- 7" outdoor-rated LCD touch screen with state of charge, power in/out, operating and charging times
- App-enabled wireless monitoring platform for real-time data, analytics, and GPS
- Resettable Input and Output Breakers

CARBON OFFSET EQUIVALENT

Offsets 110 kg of CO₂e for 8 hours operation*
*Assumes ½ load output and low CO₂e charging source



VOLTstack[®] 20k
by PortableElectric[®]

e-Generator
60,000 Wh

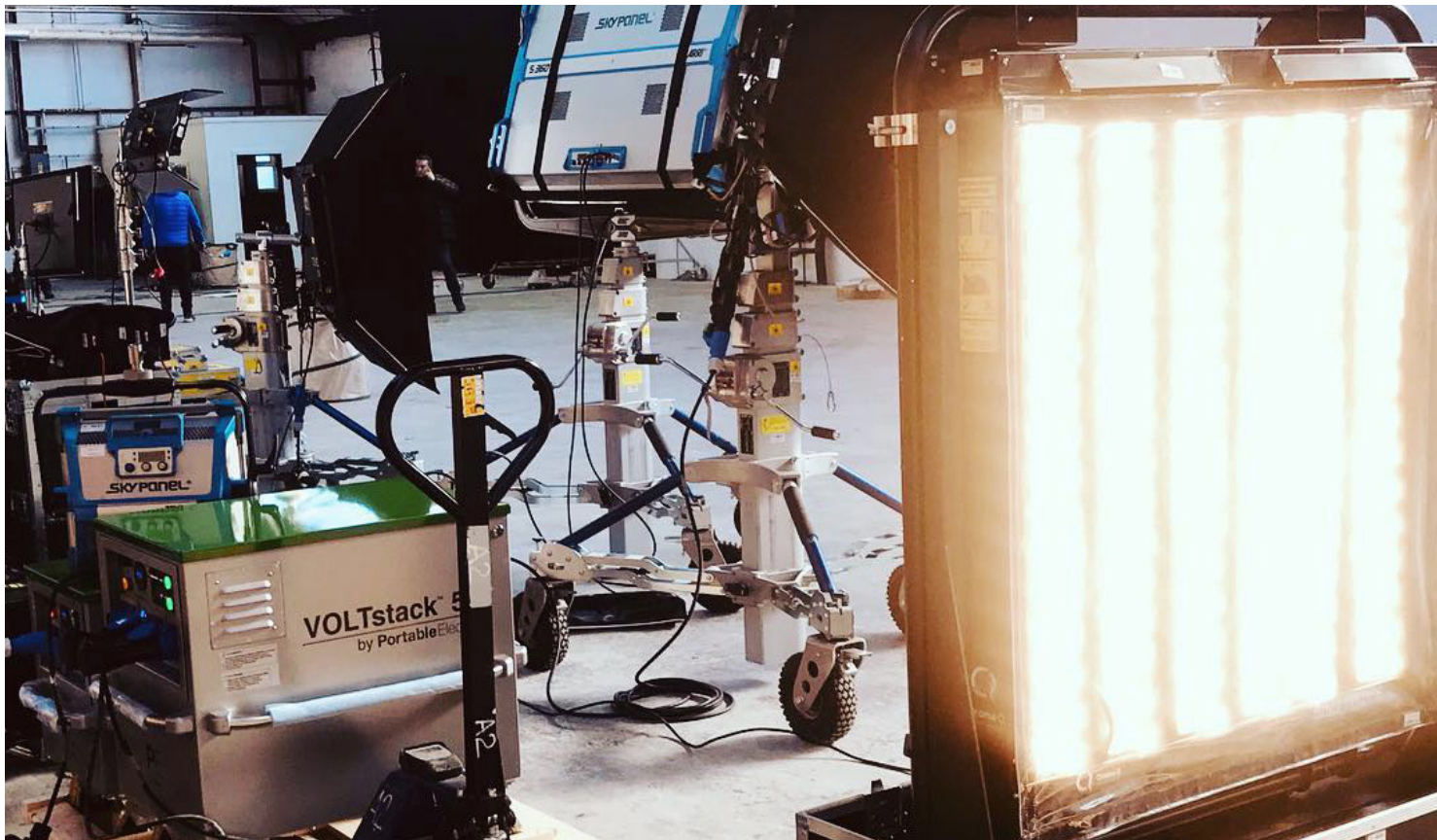


User Experiences

As a Gaffer, I know the VOLTstacks are the future of generators, and are changing the industry we work in. We are now using more low powered LED lights, and now I can save on cable runs through positioning generators.

In every application we are finding new uses for them, from lighting, locations, sound, video, camera, grip and low loader work. Everyone is asking can I use VOLTstacks to power our sets/locations on recces. Productions are supporting the use of them due to them being silent, having no fuel costs and user friendly.

- **David Sinfield, Gaffer**
No Time To Die, Aladdin, Wonder Woman



I really love using them as a way to reduce our carbon footprint and use of diesel power. We were very successful, we had three 5k VOLTstacks and a 13k VOLTstack that were used to build sets for Disney Plus' *Mandalorian*. We completely reduced the need for diesel power generator to build an entire town's worth of Star Wars sets. Really did a great job, you go out there and there's completely silent power. The guys loved it because they could have it right next to them and not be inhaling diesel fumes. As well as the silent nature, it was a real amazing tool that I was very happy to use on the project. I would definitely use them again.

- **Gavin Behrman, Production Manager**
The Mandalorian, The Call of the Wild, Blade Runner 2049

The VOLTstack is one of the most positive steps forward in movie sound in recent years. Since the very first film with sound, the noise of diesel generators has created problems for Sound Mixers recording actor's dialogue on location.

The VOLTstack is silent, meaning generators can be close to set, helping you hear the actor's original performance. All this while reducing harmful emissions. The VOLTstack is a win-win.

- Simon Hayes, Production Sound Mixer
Les Miserables, Guardians of the Galaxy, Prometheus

Portable Electric & Amazon's *Man In The High Castle* series brought our resources & mutual interests together to see how we could best integrate clean energy into film & television & to mitigate using solely diesel power generation. The ideal was to reduce our carbon footprint, fuel costs, noise disturbances etc. It has been an excellent learning & development process for both of us and we are really happy with the results.

The 5K proved useful in powering daylight splinter units, DIT downloading after camera wrap, dollies, techno 15, sound cart, short durations at crafty or catering truck etc.

The 13K was great for daylight scenes, or powering cranes & gear on water barges, big daylight establishments, downtown areas where generator placement was prohibited.

Next season we'd opt to lease 2-3 of the 5k units and rent the 13k on a daily or episodic basis. Looking forward to making film & television a more sustainable, green & clean industry.

- Yvonne Melville, Production Manager
Man in the High Castle, iZombie, Falling Skies

First we plugged one light in, checked the voltage on it, it was fine. And then we plugged in two, then we plugged in three and we ended up using eight lights. The 13k sat in the snow for three days and it never died on us once. I realize when I'm on a survey that I've got Portable Electric in my back pocket. For confined spaces, locations where you can't cable, places with noise restrictions, these make total sense. Portable Electric is what everybody needs, whether they know it or not, and it's the way the world is going.

- Billy Baxter, Gaffer
War for the Planet of the Apes, The Magicians





Portable Electric®


THE FUTURE OF POWER.™

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