

# Your path to energy conversion

Atlas Copco's consolidated Energy Storage System (ESS) range is at the heart of the power supply transformation.

Developed with sustainability in mind, it helps operators dramatically reduce their fuel consumption and CO2 emissions, while delivering optimal performance with reduced noise and service cycles. Leveraging the benefits of high-density lithium-ion batteries, these units are compact and light compared to traditional alternatives, yet capable of providing days of autonomy of power with a single charge. They are ideally suited for covering low load and noise sensitive applications such as events, metropolitan construction sites, telecom, and rental applications.

These Energy Storage Systems are a perfect fit for applications with a high energy demand and variable load profiles, as they successfully cover both low loads and peaks. For example, they can help properly size diesel generators for cranes and other electric motors, and efficiently manage peaks in energy demand for noise-sensitive events and for electric vehicle (EV) recharging stations. Furthermore, operators can synchronize several models, which can become the heart of any microgrid, storing and delivering energy coming from several energy sources, including renewables







>8 UNITS
HYBRID POWER
PLANTS



>50%
INCREASED
PRODUCTIVITY



UP TO 90% LESS FUEL AND CO₂ EMISSIONS'

\*When working in hybrid mode with power generators

### The solution to meet your needs

			#				\$			A
MODEL	POWER ENERGY	APPLICATION	MANUFACTUR- ING	EVENTS	TELECOM BROADCAST	CONSTRUCTION	MOTORS CRANES	RECHARGING POINT	GRID JOBS UTILITIES	RENEWABLES
ZBP 2000	2000 VA 2000 Wh	Noise reduction Low loads Prime power		•		•				0
ZBP 30-60 ZBP 30-75 ZBP 40-60 ZBP 40-75	30/40kVA 60/75 kWh	Peak shaving Low loads Prime power	0	•	•	•	•			0
ZBP 120-120	120kVA 120 kWh	Peak shaving Low loads Prime power	0	•	•	•	•	•		•
ZBC 250-575	250 kVA 575 kWh	Hybrid Prime power	•	•	0	•		•	•	•
ZBC 500-250	500 kVA 250 kWh	Peak shaving Prime power	0			•	•		0	
ZBC 1000-1200	1000 kVA 1200 kWh	Hybrid Prime power Peak shaving Power booster	•	•	•	•	•	•	•	•

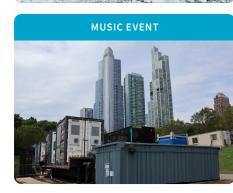
Prime power: Non-stationary demand, not UPS
Low loads: Improving a diesel genset performance
Peak shaving: Consume peaks totally or partially

MINING

Energy storage: Avoid wasting extra energy production
Noise reduction: Reduce acoustic pollution
Hybrid: Plug and play with other energy sources















Atlas Copco



# A full portfolio ready for versatile performance and applications



### **ISLAND Mode**

The island mode enables our container with integrated inverter and storage, to be used as a standalone power solution. It is an ideal way to meet the needs of noise-



### **QUIET TECHNOLOGY**

ZBC range noise level is 54db only. These models deliver reduced noise emissions, for a safer working environment. They are a perfect choice for increasing the productivity in noise-sensitive applications, such as, events and metropolitan construction sites.



### **COMPACT DESIGN**

All required batteries, power converter systems and all that you need is in one box, enabling you to reduce maintenance costs. Designed for plug and play, the full range of 10 feet and 20 feet high cube versions, are built with high energy density.



### **SAFE OPERATIONS**

Advanced fire extinguishing systems and leakage current protection systems in the ZBCs provide safe operations.

sensitive environments like night operations, sensitive events operations, or to resolve low load challenges.



### **FAST CHARGING**

In Island mode, the ZBCs can be connected directly to loads to start working. Fast charging for a full recharge in an hour is possible depending on the power source.



### **CLEAN TECHNOLOGY**

When used in island mode, CO<sub>2</sub> savings will grow exponentially if the units are powered by renewable energy sources. You can scale the solution to reach the needed energy demand with the smart paralleling system.



### MORE POWER ENDURANCE

Easily increase both energy and storage capacity by using ZBCs in parallel.

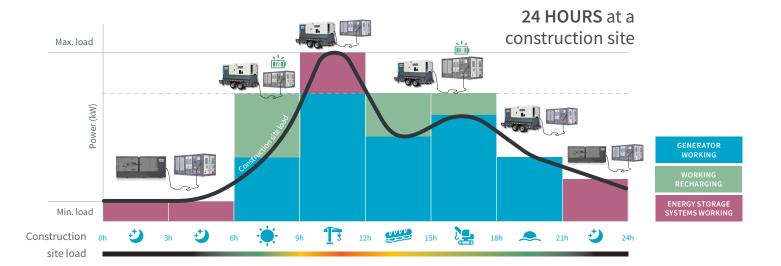
### **HYBRID Solutions**

We offer a product that is compatible with different brands of generators and their control systems, to this we call it Multi-system connection. This will provide versatility to any fleet without investing in new assets. If you prefer to go with Atlas Copco and its PMS controller then you will enjoy the benefits of our ecosystem, efficiency and customer experience taken to its next level.

ZBC range is also compatible for grid jobs. Thanks to their different grid code certificates you can work in

many different countries. Also the possibility to work with an isolated input, will provide to this jobs an easy and safe way of working.

With a wide offer of power connection options, the units are easy to connect to the different energy sources available on site. Also, thanks to ECO Controller, Atlas Copco's Energy Management System (EMS), these units can be synchronized to increase the power offering to match the demand.





### PROTECT YOUR GENERATOR FLEET

In hybrid mode with a generator, the ZBC range increases the solutions' overall efficiency, accounting for the peaks of power and low loads. They optimize the generator's performance extending its lifespan by up to 15%, and decreasing general maintenance and overhaul cost by 50%. This means that a 40% smaller generator can be used.

### Savings depending on application:

- 30 to 90% lower fuel consumption.
- Reduce generator running hours by up to 70%.
- Lower maintenance and operational costs.



### **MULTIPLE TASK**

More than just one product. You will find many solutions such as Peak Shaving, Energy Trade, Power Booster, Power Factor correction, continuous power mode in one product.



Lower fuel consumption and emissions.
30 to 90% depending on application

(avoiding the average load for the generator being below 30%)



Lower service and maintenance costs.

Depending on application, reduce generator running hours by up to 70%



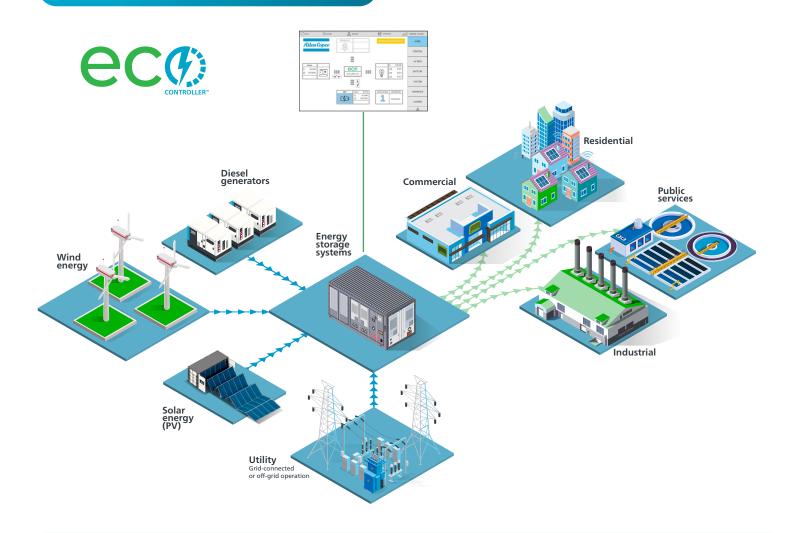
Long lifetime of generator.

Due to the above points, the lifetime of a generator is extended 5-10 years





# A key piece for the optimization of the energy supply



## **Microgrids:**

Energy Storage Systems are the heart of battery based microgrids, and thanks to Atlas Copco's in-house developed EMS, the ECO Controller™, they enhance scalable and decentralized systems with several energy inputs. These microgrids are independent power networks that use local, distributed energy resources to provide grid

backup or off-grid power to meet local electricity needs. Enabling the combination of several energy sources, the heart and the brain— Energy Storage Systems and ECO Controller™ help rental companies and operators to deploy flexible power, decarbonizing operations and achieving significant fuel, energy and lifecycle savings.

# ECO Controller, the brain of the solution

The ECO Controller™ by Atlas Copco, is a human-machine interface (HMI) that provides operators with full control over their temporary power applications by optimizing energy generation, distribution, and consumption through advanced data management.

### WHY ECO CONTROLLER?

- Fully flexible and customizable
- Provides remote control and is open to communicate with third party monitoring systems

### VERSATILITY

 The "conductor" that orchestrates energy sources with a demand side craving cleaner solutions

### WHAT DOES IT DO?

- It controls and monitors the power output integrating the collected data
- Centralizes all hybrid energy sources

### FLEXIBLE AND CONSISTENT SOFTWARE

- In-house development
- Same user experience in all products
- Scalable for global solutions and future applications

### **CONNECTED**

- Manual and automated controls
- Ensures optimal performance
- Increases component lifetime

### **FRICTIONLESS**

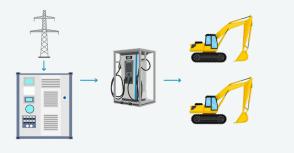
- User friendly
- Dedicated for Rental Industry
- Ensures seamless interface
- Client driven software







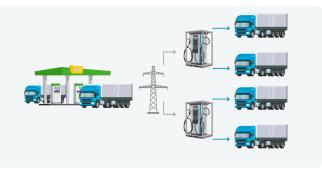
# Boosting power on site



### **Machinery electrification**

### Boosting the grid

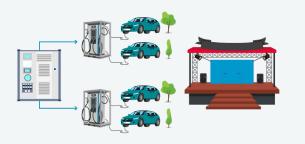
- No need of extending the grid
- Decrease construction project timeline
- Increase operational hours



### **Temporary recharging station**

### **High demand**

- No need of fix installation investment
- Cover seasonal or trend needs
- Scalable



### **Events**

### Remote, no access to the grid

- Remote areas with no grid access
- Perfect match with Mobile renewables (solar)
- Mobile around the site for convenience

## **EV** charging station and grid booster

The electrification of the equipment calls for compliant and efficient recharging stations.

Providing a full portfolio of and the Fast Charger ensure flexible performance on site. Atlas Copco's FCP range increases the charging rate of battery-driven heavy machinery, equipment and vehicles.

The modularity of this solution will allow the end user to design the best set up for every application. And, when the grid available is limited, and the electric and battery-driven loads are peaking, a ZBC is ideal to boost the grid to cover that high demand.

		FCP 240
General technical data		
Rated power input/output (PF=0.99)	kW	240
Connector type		2 x CCS 1, NACS available
Number of ouputs / cable length		2 / 23ft
Charging Current	А	300
Rated input voltage (50Hz)	VAC	480V +/- 15%
Ouput voltage range	VDC	200-1.000
Input Type		Camlocks
Ingress Portection IP		55
Peak efficiency		96%
Cooling methode for AC / DC		Forced Air cooling
Operating temperature	°F	-13° to 122°
Communication interface		Ethernet/GPS/3G/4G/WIFI
Dimensions and weight		
Dimensions (L x W x H)	in	55.4 x 51.5 x 93.5
Weight	lbs	1.874







# Container range Energy Storage Systems

250 kVA - 500 kVA

### **SCALABLE SOLUTION**

- Paralleling capability with >16 units working as hybrid power plants
- Microgrid possibility with other energy sources such as grid, renewables and generators







### **PLUG AND PLAY**

- External connections Input/Output and control for an easier hybridization
- Alarms and emergency button access
- Fire suppression system as standard (FSS)
- FleetLink real time remote monitoring.



### **EFFICIENT PRODUCT DESIGN**

- Lithium-ion phosphate batteries (LFP)
- Built sturdy for tough work environments (IP54 design)
- Air forced cooling technology together with high efficient HVAC cooling solutions.





### **MEET REGULATIONS**

- Reduce noise pollution
- Reduce or eliminate CO<sub>2</sub> and NOx emissions during operation
- Provide efficient renewable solutions



### LOWER COST OF OWNERSHIP

- Increased lifespan of hybrid fleet
- Reduced maintenance cost
- Increased productivity while meeting emission and noise regulations





		ZBC 250-575	ZBC 500-250	ZBC 1000-1200
		ZDC 230-313	ZDC 300-Z30	ZBC 1000-1200
General technical data				
Nominal power	kVA/kW	250	500	1,000
Nominal energy storage capacity	kWh	575	246	1,232
Nominal voltage (60Hz)	VAC	480	480	480
Battery system voltage	VDC	672-864	672-864	672-864
Nominal current discharge	A	300	600	1,202
Operating temperature	°F	-4 to 122	-4 to 122	-4 to 122
Battery				
Quantity	units	30	20	80
Battery type		LiFePO4	LiFePO4	LiFePO4
Nominal voltage	VDC	76.8	76.8	76.8
Rated capacity (@25°C)	Ah	250	160	200
C-rate discharge		0.5	2	1
Recommended Depth of discharge (DoD%)	%	90	90	90
End of life (EOL%)	%	70	70	70
Expected cycle life (@DoD,EOL,25°C)	Cycles	6,000	6,000	6,000
Battery callibration (recharge up to 100%)		Once per 3 month	Once per 3 month	Once per 3 month
Inverter				
Quantity (modules)	units	4	8	16
Total nominal power	kW / kVA	250/250	500 / 500	1,000
Maximum peak power (for seconds)	kVA	275	550	1,100
Input DC voltage range	Vdc	600-900	600-900	600-900
Built in transformer		Yes	No	No
Performance				
Discharge autonomy 100% / 75% rated power	h	2/2.6	0.5 / 0.7	1/1,3
Discharge autonomy 50% / 25% rated power	h	4/8	0.9 / 1.8	2/4
Recharging time (@DoD%)	h	2	0.4	0.9
Hybrid recommendation (generator size)	kVA	200-1,000	200-1,000	500-2,000
Power factor acceptance		-11	-11	-11
Heating / Cooling system		HVAC	HVAC	HVAC
Fire extinguisher system included		Yes	Yes	Yes
Derating temperature	°F	from 104	from 104	from 104
On-grid and off-grid applications		Yes	Yes	Yes
UL/CSA certified		Yes	Yes	Yes
Continous power mode	kW	250	300	800
Dimensions and weight				
Dimensions (L x W x H)	ft	9.81 x 8 x 9.5	9.81 x 8 x 9.5	20 x 8 x 10
Weight (with trailer)	lb	24,250 (34,151)	23,152 (33,048)	55,125 (68,125)
Protection degree IP		54	54	54
Housing			) ft high cube	Container 20 ft high cube
-		30		





# **Container range Energy Storage Systems**

**ZBC 1000 kVA** 

1000 kW power output and Energy capacity of 1200 kWh packed into a HC 20ft container

### **EASY REMOTE MONITORING**

- ECO Controller™ energy management system
- FleetLink intelligent telematics





### **PLUG AND PLAY**

- Quick to install and use
- Reduced manpower
- Portable and easy to connect



### **PERFORMANCE**

- Microgrid capabilities
- Scalable with up to 8 units, delivering up to 8 MW of power.
- Twin energy: 2 subsystems working synchronized
- Providing redundancy in critical applications
- Reducing the cycles and battery aging







### **REDUCED OPERATIONAL COSTS**

- Reduced fuel consumption and CO<sub>2</sub> emissions
- Reduced fuel management servicing and maintenance costs
- One energy storage system replaces multiple generators in a power plant
- Thermal management and safe operations





**Atlas Copco** 

## **Perfect Pairing Hybrid Solutions**

Current Generator		Perfect Pa	airing Hybrid S	ystem	Application Voltage	Average Load	Fuel Consumption	Service Interval for
Power Range	kVA	Generator	ESS	Max Power	voitage	LUau	Savings	Hybrid up to
Up to 36kW	20 - 45	QAS 45	ZBP 30-75	Up to 60kW	208V 3PH			
Up to 25kW	20 - 45	QAS 45	ZBP 40-75	Up to 50kW	240/120V 1PH			
Up to 52kW	70	QAS 70	ZBP 30-75	Up to 70kW	208V 3PH	DOWN TO 10%	UP TO 90%	UP TO 5000 hrs  or  UP TO 1yr
Up to 35kW	70	QAS 70	ZBP 40-75	Up to 60kW	240/120V 1PH			
120 to 200kW	250	QAS 200 / QAS 235 / QAS 250	ZBC 250-575	Up to 410kW - 450kW				
200 to 264kW	330	QAS 200 / QAS 235 / QAS 250 / QAS 330	ZBC 250-575	Up to 500kW	480V 3PH			
2644 220144	44.0	QAS 200 / QAS 235 / QAS 250 / QAS 330	ZBC 250-575	Up to 500kW				
264 to 328kW	410	QAS 175	ZBC 500-250	Up to 640kW	400 V 3111			
328 to 560kW	700	QAS 410 /QAS 700	ZBC 250-575	Up to 575 kW - 810kW				
		QAS 235 / QAS 250	ZBC 500-250	Up to 700 kW				



Replacement of 70kVA by QAS 70 + ZBP 30-75









Series Mode with Pass Through

Replacement of 700kVA by QAS 410 + ZBC 250-575













# Mobile range Energy Storage Systems

**ZBP 30 kVA - 40 kVA** 



### THE ERA OF CONNECTIVITY

- ECO controller™, dedicated management system the brain of the solution
- Remote monitoring system
- Master system for: Technical diagnosis and fuel saving calculations



### LITHIUM-ION TECHNOLOGY

- Perfect match for short cycles (charge and discharge) performance
- Large usable energy range compared to other technologies
- Low total cost of ownership







### MODULAR AND MOBILE

- Water and dust isolation IP55
- Galvanized skid
- Integrated lifting structure with single elevation point
- Dedicated maintenance doors
- Ratchet Straps guides

### PLUG AND PLAY

- Wide connection panel for multiple socket combinations
- Plug and play sockets with any genset and load
- Passthrough limitation 200A



**ZBP 30-60** 

**ZBP 30-75** 

ZBP 40-60

**ZBP 40-75** 

(1) Cold weather option included (2) Lithium iron phosphate (3) Under specific conditions (check with technical support) (4) 4 kW of full heating or 0.8 kW fans (5) Paralleling capabilities available (check with technical support)

Atlas Copco is not responsible for any problem that may occur due to errors or changes of these data. They can also be changed or rectify without prior notification. Some of our certificates (Batteries UL1973, UN38.3, IEC62281, IEC62619) (Performance EN-IEC 61000, EN-IEC 60335, EN-IEC 60335, EN-IEC 62109, EN 55014, UL1741, IEEE1547, UL1741, UL9540, NEMA250) Road and sea transport ADR class 9, UN 3536, CE, NEN3140, NEN3840, ISO9001, ISO14001, Low Voltage Directive 2014/35/EU, EMC directive 2014/30/EU (for further information check with Atlas Copco technical support).





# Mobile range **Energy Storage** Systems

ZBP 120 kVA



### THE ERA OF CONNECTIVITY

- ECO controller™, dedicated management system - the brain of the solution
- Remote monitoring system with 2-way communication
- Master system for: Technical diagnosis and fuel saving calculations





- Perfect match for short cycles (charge and discharge) performance
- Large usable energy range compared to other technologies
- Low total cost of ownership









### **MODULAR AND MOBILE**

- Water and dust isolation IP55
- Galvanized skid
- Integrated lifting structure with single elevation point
- Dedicated maintenance doors
- Ratchet Straps guides

### **PLUG AND PLAY**

- Switch between 480V and 208V within seconds
- Use passthrough mode for easy setup, or parallel mode for scalability and intelligence
- Up to 45 kW of DC solar charging capability
- Wide connection panel for multiple socket combinations
- Plug and play sockets with any genset and load



		ZBP 120-120
General Technical Data		
Rated power	kVA	120
Rated energy storage capacity	kWh	122.8
		480/277
Rated voltage (60Hz)	VAC	208/120
		240/120
DC total battery Voltage	VDC	614
Rated current discharge	Α	144
Operating temperature (1)	°F	-4 to 122
Battery		
Quantity	units	8
Battery type (2)		LiFePO4
Rated voltage	VDC	76.8
Total DC Voltage	VDC	76.8
Rated capacity (@77°F / 25°C)	Ah	200
C-rate discharge		1C
Recommended Depth of discharge (DoD%)	%	95
End of life (EOL%)	%	70
Expected cycle life (@DoD,EOL,77°F / 25°C) (3)	Cycles	6,000
Battery balancing requirement (recharge up to 100%)		Once per month
Inverter		
Quantity	units	4
Maximum apparent power	kVA	120
Maximum passthrough current	A	400
Built in transformer		Yes
		ics
Performance		
Discharge autonomy 100% / 75% rated power	h	0.9 / 1.5
Discharge autonomy 50% / 25% rated power	h	2/4
Recharging time	h	2.9
Hybrid recommendation (generator size)	kVA	100-300
Power factor acceptance		0.1 1
Heating / Cooling system		Heaters / Air cooled
Maximum auxiliary consumption (4)	kW	8.2
Total energy through output up to (3)	MWh	400
Dimensions and Weight		
Dimensions (L x W x H)	ft	7.4 x 4.5 x 7.4
Weight (with trailer)	lb	7,320 (7,838)
Protection degree IP		IP 55
Housing		Galvanized Metal canopy
(1) Cold weather option included (2) Lithium iron phosphate (3) Under specific conditions (check with technical support) (4) 4 kW of full heating or 0.8 kW fans (5) Paralleling capabilities available (check with technical support)  **Fital Copico**  **Fital Copico**  **Tital Copico	of the our of IEC 6 UL174	Copco is not responsible for any problem that may occur due to errors or changes ese data. They can also be changed or rectify without prior notification. Some of ertificates (Batteries UL1973, UN38.3, IEC62281, IEC62619) (Performance EN-1000, EN-IEC 60335, EN-IEC 60335, EN-IEC 62109, EN 55014, UL1741, IEEE1547, 41, UL9540, NEMA250) Road and sea transport ADR class 9, UN 3536, CE, NEN3140, 840, ISO9001, ISO14001, Low Voltage Directive 2014/35/EU, EMC directive 2014/35/EU, for further information check with Atlas Copco technical way and tascopco.com/energy-storage-systems 17

# Hybrid Mobile Generators

60-75 kVA



### THE ERA OF CONNECTIVITY

- ECO controller<sup>™</sup>, dedicated management system the brain of the solution
- Remote monitoring system with 2-way communication





### LITHIUM-ION TECHNOLOGY

- Perfect match for short cycles (charge and discharge) performance
- Large usable energy range compared to other technologies
- Low total cost of ownership





### **PLUG AND PLAY**

- Hybrid power ready solution.
- Wide connection panel for multiple socket & protection combinations
- Quick Setup and easy control with centralized control panel

### **VERSATILE OPERATIONS**

- Passthrough: up to 200A of electrical current to flow directly from input.
- Series Mode with another ZBP for added "Low noise".
- Parking Mode 120V (Engine Heater, Battery Heater & slow battery recharge).
- Solar Power input up to 8kW. Compliant with solar panels up 150-250V (option).

		EPH 60-60	EPH 60-75	EPH 70-60	EPH 70-75	EPH 75-60	EPH 75-75
Hybrid generator	Units						
Rated frequency	Hz	60	60	60	60	60	60
Rated voltage	VAC	208 / 120	208 /120	240 /120	240 /120	208 / 120	208 / 120
Maximum hybrid power 77°F	kVA/kW	60 / 60	60 / 60	60 / 60	60 / 60	75 / 75	75 / 75
ESS Rated power 77°F	kVA/kW	24 / 24	24 / 24	32 / 32	32 / 32	24 / 24	24 / 24
Rated energy storage capacity	kWh	57.6	76.8	57.6	76.8	76.8	76.8
Battery rated voltage	VDC	48	48	48	48	48	48
Max current output	А	166	166	250	250	208	208
Recharge time 100% rated power	h	1.8	3.2	2.1	2.7	3.2	3.2
Depth of discharge (DoD%)	%	90	90	90	90	90	90
Battery type				Lithium Iron pho	sphate LiFePO4		
Operating temperature	٥F	-4° to 122°	-4° to 122°	-4° to 122°	-4° to 122°	-4° to 122°	-4° to 122°
Prime power diesel (PRP)	kVA/kW	36 / 36	36 / 36	39 / 39	39 / 39	51 / 51	51 / 51
Fuel Tank Capacity: daily	gal	75	75	110	110	110	110
Fuel consumption (average)	gal/kwh	0.07	0.07	0.07	0.07	0.07	0.07
Weight	lbs	8,200	8,500	9,700	9,900	9,700	9,900
Dimensions (L x W x H)	in	230 x 88 x 140	230 x 88 x 96	230 x 88 x 96	230 x 88 x 96	230 x 88 x 96	230 x 88 x 96

### What are hybrid generators?

The Atlas Copco EPH's are modular hybrid generators perfect for increase fleet utilization as well as reduce fuel consumption and CO<sub>2</sub> emissions. Both, state of the art, QAS Tier 4 Final and ZBP ranges are integrated into a single trailer for easy transport and simple ease of use, one click solution.

Based in lithium-ion batteries and Stage V technology, EPH are designed to supply power on a vast variety of hybrid applications, such as rental, construction, events and telecom. Giving flexibility to the final product with a list of options such as solar panel connection to increase its sustainability or cold weather kit for the most critical environments.

These hybrid generators feature an innovative design meeting the strictest environmental regulations and helping end-users to optimize their operational performance and costs. Thanks to their high resilience in fast and easy connection, these models are unrivaled when it comes to flexibility. The EPH range is "Plug-and-Play" (multiple sockets and camlocks), features easy fast connections for fuel (EFT connection), Fleetlink Telemetry.



# Reasons to use hybrid generators?



90% LESS FUEL CONSUMPTION



UP TO 46k\$ savings in 1 year working 24/7



Lower emissions
UP TO 86%
CO<sub>2</sub> savings



One click solution



95% Generator time reduction

Savings obtained using a standard construction-crane power profil

Atlas Copco is not responsible for any problem that may occur due to errors or changes of these data. They can also be changed or rectify without prior notification. Some of our certificates (Batteries UL1973, UN38.3, IEC62281, IEC62619) (Performance EN-IEC 61000, EN-IEC 60335, EN-IEC 60335, EN-IEC 62109, EN 55014, UL1741, IEEE1547,

UL1741, UL9540, NEMA250) Road and sea transport ADR class 9, UN 3536, CE, NEN3140, NEN3840, ISO9001, ISO14001, Low Voltage Directive 2014/35/EU, EMC directive 2014/30/EU (for further Information check with Atlas Copco technical support)





# The lightest and most portable of our **Energy Storage Systems**

classification and has an Ingress Protection rating from dust and water in harsh environments.

The lightest and most portable of our Energy Storage With the option to parallel up to 5 units, the solution Systems, the ZBP 2000, which is built to small events, can be scaled up to 10kWh of modular energy small construction sites, and is especially useful storage, enhancing performance and reducing total for powering small electric tools. Compact and cost of ownership. The ZBP 2000 also comes with lightweight, the unit has IK09 impact resistance two small foldable solar panels that could be used to recharge in great weather conditions or to maintain of IP65, meaning it provides exceptional protection a proper battery level during less efficient production days.

### **MEET REGULATIONS**

- Reduced noise and no emissions working standalone and with renewable energy sources
- ANSI/CAN/UL 2743











### **EXCELLENT PERFORMANCE**

- Series capabilities up to 5 units
- IP65 classified: water and dust isolation
- Fire extinguishing system included
- Heater for cold temperatures

### **PORTABLE SOLUTION**

- Light and compact
- Less than 3.5 ft<sup>3</sup> / 0.1 m<sup>3</sup> volume
- Handle to pull
- IK09 certified: impact test resistance
- Socket configuration: 2 x NEMA 5-15R (PAIR); USB





### THE ERA OF CONNECTIVITY

- WIFI and APP connection
- Defined alarms
- System status capacity

General Technical Data		
Rated power	kVA	2
Rated energy storage capacity	kWh	2.16
Rated voltage (60Hz)	VAC	120
DC total battery Voltage	VDC	48
Rated current discharge	А	20
Operating temperature (1)	٥F	14 to 113
Battery		
Quantity	units	1
Battery type (2)		LiFePO4
Rated voltage	VDC	48
Total DC Voltage	VDC	48
Rated capacity (@77°F / 25°C)	Ah	45
C-rate discharge		1C
Recommended Depth of discharge (DoD%)	%	90
End of life (EOL%)	%	80
Expected cycle life (@DoD,EOL,77°F / 25°C) (3)	Cycles	2,000
Battery balancing requirement (recharge up to 100%)		Once per month
Inverter		
Quantity	units	1
Maximum apparent power (3)	kVA	3
Maximum passthrough current	Α	18
Built in transformer		No
Performance		
Discharge autonomy 100% / 75% rated power	h	1 / 1.5
	h h	1 / 1.5 2 / 4
Discharge autonomy 100% / 75% rated power		
Discharge autonomy 100% / 75% rated power Discharge autonomy 50% / 25% rated power	h	2 / 4
Discharge autonomy 100% / 75% rated power Discharge autonomy 50% / 25% rated power Recharging time	h h	2 / 4
Discharge autonomy 100% / 75% rated power Discharge autonomy 50% / 25% rated power Recharging time Hybrid recommendation (generator size)	h h	2 / 4 3 3.5
Discharge autonomy 100% / 75% rated power  Discharge autonomy 50% / 25% rated power  Recharging time  Hybrid recommendation (generator size)  Power factor acceptance	h h	2 / 4 3 3.5 -1 1
Discharge autonomy 100% / 75% rated power Discharge autonomy 50% / 25% rated power Recharging time Hybrid recommendation (generator size) Power factor acceptance Heating / Cooling system	h h	2 / 4 3 3.5 -1 1 Heater / Air cooled
Discharge autonomy 100% / 75% rated power Discharge autonomy 50% / 25% rated power Recharging time Hybrid recommendation (generator size) Power factor acceptance Heating / Cooling system Fire extinguisher system included Maximum auxiliary consumption	h h kVA	2 / 4  3  3.5  -1 1  Heater / Air cooled  Yes
Discharge autonomy 100% / 75% rated power Discharge autonomy 50% / 25% rated power Recharging time Hybrid recommendation (generator size) Power factor acceptance Heating / Cooling system Fire extinguisher system included	h h kVA	2 / 4  3  3.5  -1 1  Heater / Air cooled  Yes
Discharge autonomy 100% / 75% rated power Discharge autonomy 50% / 25% rated power Recharging time Hybrid recommendation (generator size) Power factor acceptance Heating / Cooling system Fire extinguisher system included Maximum auxiliary consumption  Dimensions and Weight	h kVA kW	2 / 4  3  3.5  -1 1  Heater / Air cooled  Yes  0.03
Discharge autonomy 100% / 75% rated power Discharge autonomy 50% / 25% rated power Recharging time Hybrid recommendation (generator size) Power factor acceptance Heating / Cooling system Fire extinguisher system included Maximum auxiliary consumption  Dimensions and Weight Dimensions (L x W x H)	h h kVA kW	2 / 4  3  3.5  -1 1  Heater / Air cooled  Yes  0.03

(3) Under specific conditions (check with technical support) (5) Paralleling capabilities available (check with technical support)

IEC62619) (Performance EN-IEC 61000, EN-IEC 60335, EN-IEC 60335, EN-IEC 62109, EN 55014, UL1741, IEEE1547, UL1741, UL9540, NEMA250) Road and sea transport ADR class 9, UN 3536, CE, NEN3140, NEN3840, ISO9001, ISO14001, Low Voltage Directive 2014/35/EU, EMC directive 2014/30/EU (for further information check with Atlas

**ZBP 2000** 





# **Mobile Solar Containers**

ZSC 100-400, ZSP 8-40

### **LOW OPERATIONAL COSTS**

- Virtually no maintenance
- Renewable energy from the sun
- Meets noise and emission norms
- ZSC 100-400 can save up to 108 tons of CO<sub>2</sub> per year as compared to traditional diesel gensets



### **EFFICIENT DESIGN**

- East-West installation
- Compact and mobile

### **PLUG AND PLAY**



### **VERSATILE OPERATIONS**

- Renewable energy solutions for temporary power requirements
- Solar power generation to meet needs of temporary energy providers or mobile power projects

### **SMART LOAD MANAGEMENT**

- Paralleling capability scalable solution
- Microgrid possibility with other energy sources







Mobile solar containers are designed to provide reliable and renewable energy solutions, especially in remote or off-grid locations.

ZSC containers are highly portable, allowing for easy transportation and deployment, making them ideal for temporary setups or locations where traditional power infrastructure is not available.

By harnessing solar energy, they reduce reliance on fossil fuels and minimize carbon emissions, to meet regulatory norms. Once installed, the ZSC containers provide free energy from the sun, leading to significant savings on energy costs over time. The minimal maintenance of the

ZSC, reduces operational expenses.

The ZSC containers can be used in versatile applications like construction sites, disaster relief operations, remote research stations, and more. Their ability to provide a stable and reliable power source in diverse environments makes them a valuable asset.

These containers are also scalable. Depending on the energy needs, multiple units can be deployed to increase power capacity. This flexibility allows for tailored energy solutions that can grow with project requirements.

		ZSP 8-40	ZSC 100-400	
General technical data				
Solar capacity	kWp	8.3	100	
Energy average generation per day	kWh/day	40	400	
Rated output current (480V)	А	n/a	120	
(Un)folding time	min	10	120	
Voltage output AC/ DC	V	199 (DC)	480 (AC)	
Frequency output	Hz	n/a	60	
Orientation		Any azimuth (east to west ideally)		
Module tilt angle		15°	15°	
Slope limit		No need fo	or leveling	
Operating temperature	°F	-4 to 140		
Communication interface		CAN-PMS / Modbus / RS485 / webconnect		
Area required (complete unfolded+workspace)	sqft	570	1,199	
Area required (split unfolded+workspace)	m2 / sqft	n/a	986	
Dimensions and weight				
Weight	Lbs	2,020	26,455	
Unfolded Dimensions (L x W x H)	ft	72×7.8×5	335 x 20 x 3.2	
Folded Dimensions (L x W x H) ISO 20ft	ft	4 x 7.8 x 5	986	

### **Temporary power solutions:**









# **Product Portfolio**

### **ENERGY STORAGE SYSTEMS**

EXTRA SMALL 2-10 kVA







MEDIUM 250-500 kVA



LARGE 1,000 kVA

### **GENERATORS**

PORTABLE 2-8 kVA







### Solar and portable Charger

SOLAR ARRAYS







### LIGHT TOWERS

ELECTRIC



SOLAR



DIESEL



### **ONLINE SOLUTIONS**

### FLEETLINK

An intelligent telematics system that helps optimize fleet usage and reduce maintenance, ultimately saving time and cutting operating costs.

### LIGHT THE POWER: YOUR SIZING TOOL

A useful calculator to help you choose the best solution for your power and light needs.







### **Atlas Copco Power Technique North America**

1059 Paragon Way Rock Hill, SC 29730 Phone: +1 (800) 732-6762 atlascopco.com/en-us