



Sterling PBES Containerized Energy Storage



CanPower Containerized Energy Solution

Sterling PBES CanPower is an end to end Microgrid, containing DC Energy Storage and all of the AC power equipment needed to power your application. CanPower delivers 100% uptime and has been engineered to exceed the extreme operating conditions and demanding standards of commercial marine, ports and industrial grid applications.

CanPower is fully mobile and easily transported by truck, rail or ship to virtually any location. It is available for sale or lease with a 10 year 100% replacement warranty, and is remotely monitored around the clock by the Sterling PBES data analysis system for management and performance.

CanPower Microgrids are available in 20 - 40' containers. Container is designed to DNV 2.7.3



CanPower – Energy 800VDC Systems Containerized Storage Solution

	20ft. Standard Container	20ft. High Cube Container	40ft. Standard Container	40ft. High Cube Container
Energy Storage Capacity	1,548 kWh	1830 kWh	3,660 kWh	4364 kWh
Container Format	20ft. Standard shipping container with 1.5m wide by 0.8m high space added along length of roof top	20ft. High Cube shipping container with 1.5m wide by 0.8m high space added along length of roof top	40ft. Standard shipping container with 1.5m wide by 0.8m high space added along length of roof top	40ft. High Cube shipping container with 1.5m wide by 0.8m high space added along length of roof top
Overall Height	3,392mm (134in)	3,738mm (147in)	3,392mm (134in)	3,392mm (134in)
Overall Length	6,056mm (238in)	6,056mm (238in)	12,141mm (478in)	12,141mm (478in)
Overall Width	2,438mm (96in)	2,438mm (96in)	2,438mm (96in)	2,438mm (96in)
Overall Weight*	Approx. 28,600 kg	Approx. 33,850 kg	Approx. 62,400 kg	Approx. 75,000 kg
Lifting Arrangement	By straps, with/without spreader	By straps, with/without spreader	By straps, with/without spreader	By straps, with/without spreader
Cell Technology	NMC	NMC	NMC	NMC
Number of BBUs	90 @ 17.6 kWh each	110 @ 17.6 kWh each	210 @ 17.6 kWh each	248 @ 17.6 kWh each
Number of MBUs	18	22	42	62
System Voltage	800 VDC	800 VDC	800 VDC	800 VDC
Voltage per BBU	200 VDC	200 VDC	200 VDC	200 VDC
Battery Cell Type	Energy, 100 Ah	Energy, 100 Ah	Energy, 100 Ah	Energy, 100 Ah
Cell Maximum Charge Rate	Continuous 1C	Continuous 1C	Continuous 1C	Continuous 1C
Cell Maximum Discharge Rate	Peak 3C, continuous 2C	Peak 3C, continuous 2C	Peak 3C, continuous 2C	Peak 3C, continuous 2C
Access	Full Access to battery modules, controllers, and power electronics			
Protection Rating	IP 65			
Power Electronics Specification	AC input 400VAC 3phase 50/60Hz to 690VAC 3phase 50/60Hz AC to DC conversion for charging and discharging: 1. Active front end (AFE), Microgrid (UG) and DC/DC converters 2. Centralized control and monitoring (CCM) system 3. AC Switchboard with breakers 4. DC interconnection 5. Pre charging unit 6. HMI display for CCM 7. Battery control unit interface (Isolation transformer to be provided by ship or shore side)			
Power Connection	Plug type – Customer defined, located at switchboard end, accessed externally			

*Includes Container Weight



CanPower – Energy 1000VDC Systems Containerized Storage Solution

	20ft. Standard Container	20ft. High Cube Container	40ft. Standard Container	40ft. High Cube Container
Energy Storage Capacity	1,584 kWh	1,936 kWh	3784 kWh	4576 kWh
Container Format	20ft. Standard shipping container with 1.5m wide by 0.8m high space added along length of roof top	20ft. High Cube shipping container with 1.5m wide by 0.8m high space added along length of roof top	40ft. Standard shipping container with 1.5m wide by 0.8m high space added along length of roof top	40ft. High Cube shipping container with 1.5m wide by 0.8m high space added along length of roof top
Overall Height	3,392mm (134in)	3,738mm (147in)	3,392mm (134in)	3,392mm (134in)
Overall Length	6,056mm (238in)	6,056mm (238in)	12,141mm (478in)	12,141mm (478in)
Overall Width	2,438mm (96in)	2,438mm (96in)	2,438mm (96in)	2,438mm (96in)
Overall Weight*	Approx. 28,600 kg	Approx. 33,850 kg	Approx. 62,400 kg	Approx. 75,000 kg
Lifting Arrangement	By straps, with/without spreader	By straps, with/without spreader	By straps, with/without spreader	By straps, with/without spreader
Cell Technology	NMC	NMC	NMC	NMC
Number of BBUs	90 @ 17.6 kWh each	110 @ 17.6 kWh each	215 @ 17.6 kWh each	260 @ 17.6 kWh each
Number of MBUs	18	22	43	52
System Voltage	1,000 VDC	1,000 VDC	1,000 VDC	1,000 VDC
Voltage per BBU	200 VDC	200 VDC	200 VDC	200 VDC
Battery Cell Type	Energy, 100 Ah	Energy, 100 Ah	Energy, 100 Ah	Energy, 100 Ah
Cell Maximum Charge Rate	Continuous 1C	Continuous 1C	Continuous 1C	Continuous 1C
Cell Maximum Discharge Rate	Peak 3C, continuous 2C	Peak 3C, continuous 2C	Peak 3C, continuous 2C	Peak 3C, continuous 2C
Access	Full Access to battery modules, controllers, and power electronics			
Protection Rating	IP 65			
Power Electronics Specification	AC input 400VAC 3phase 50/60Hz to 690VAC 3phase 50/60Hz AC to DC conversion for charging and discharging: 1. Active front end (AFE), Microgrid (UG) and DC/DC converters 2. Centralized control and monitoring (CCM) system 3. AC Switchboard with breakers 4. DC interconnection 5. Pre charging unit 6. HMI display for CCM 7. Battery control unit interface (Isolation transformer to be provided by ship or shore side)			
Power Connection	Plug type – Customer defined, located at switchboard end, accessed externally			

*Includes Container Weight

