

# GESS-SW-2000TL-DC

## 1.118MW/2.236MWh (0.5C)



GESS



**SPECIALLY DESIGNED  
BESS FOR  
ARCTIC ENVIRONMENT**

Global Energy Storage Solutions Battery AB

Helgenäsvägen 37, 594 75 Edsbruk, Sweden. | +46 769 411422 | [www.gess.se](http://www.gess.se) | [info@gess.se](mailto:info@gess.se)

MM-GESS-0040



## Features

- 1.118MW/2.236MWh capacity Forced Air-cooled (0.5CP; 1.118MW throughout 10 years guaranteed)
- Cold start operations from -55°C \*
- Can operate in extreme environments up to -40°C\* or -55°C \* (Standard version designed for -20°C)
- Special Auxiliary heating systems to keep the battery warm for black start \*
- Fully containerized IP55 system
- Internal humidity controller to ensure to prevent static discharge in extreme weather conditions \*
- Separate remote condition monitoring system to monitor Internal & external CCTV cameras, Fire system, door sensors, humidity & temperature \*
- Specially designed for FFR market with less than 600ms response time
- Can be used for other BESS applications (Reactive power trading, Peak shaving, UPS etc.)
- LiFePO4 Battery technology
- Backup power unit for emergency internal usage
- Clip-on Generator mounting facility and supply socket to facilitate to maintain the BESS temperature during transport \*
- Directly communicating with IEC60870-5-104

### CELL Standard:

- IEC 62619
- UL 1973
- UL9540A
- UN 38.3

### Pack Standard:

- IEC 62619
- UL9540A

### System Standard:

- IEC 62619

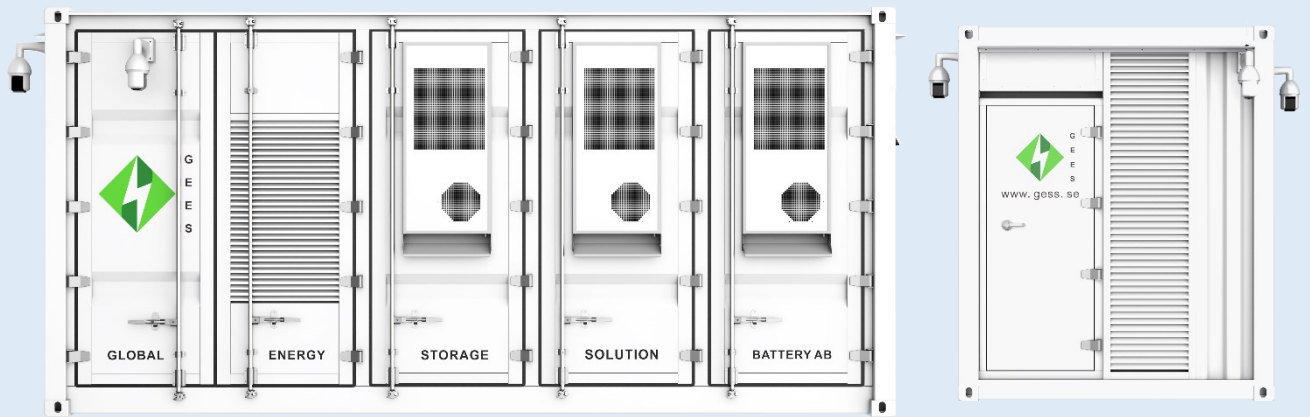
Technical specification	GESS-SW-2000TL-DC
Rated discharge power (kW)	1118
Rated charging power (kW)	1118
Rated capacity (kWh)	2236
Max. power (kW)	1320
Max. 2Sec power (kW)	1440
No of Cells	2496
Battery clusters (units)	6
Number of battery stacks	6
Dimensions (L x W x H) mm	6058 *2438 *2896
Weight (T)	<28Ton
Cell parameters	
Cell type	LFP
Rated capacity (Ah)	280
Rated voltage (V)	3.2
Rated energy (kWh)	0.896
Voltage range (V)	2.0-3.65
Charging cut-off voltage (V)	3.6
Discharge cut-off voltage (V)	2.8
Operating humidity	< 85% ROH, no condensation
Power Efficiency	97%
Calendar life	not less than 10 years
Battery pack parameters	
Combination	1P16S
Rated capacity (Ah)	280
Rated voltage (V)	51.2
Low voltage (V)	46.4
High voltage (V)	56.32
Power (kW)	14.336

Battery cluster parameters	
Battery packs	26
Rated capacity (Ah)	280
Rated voltage (V)	1331.2
Low voltage (V)	1206.4
High voltage (V)	1464.32
Power (kW)	372.736
Rated energy (kWh)	372.736
Series-parallel	1P26S
Battery stack parameters	
Clusters	1
Rated capacity (Ah)	280
Rated voltage (V)	1331.2
Power (kW)	372.736
Rated capacity (kWh)	372.736
BESS parameters	
Stacks	6
Rated voltage (V)	1331.2
Low voltage (V)	1206.4
High voltage (V)	1464.32
Rated power (kW)	2236.416
Rated current (A)	1680
Fire Fighting system	
Perfluorohexanone fire protection system	1 set
Cooling system	
Forced air cooling system with six air conditioner units	

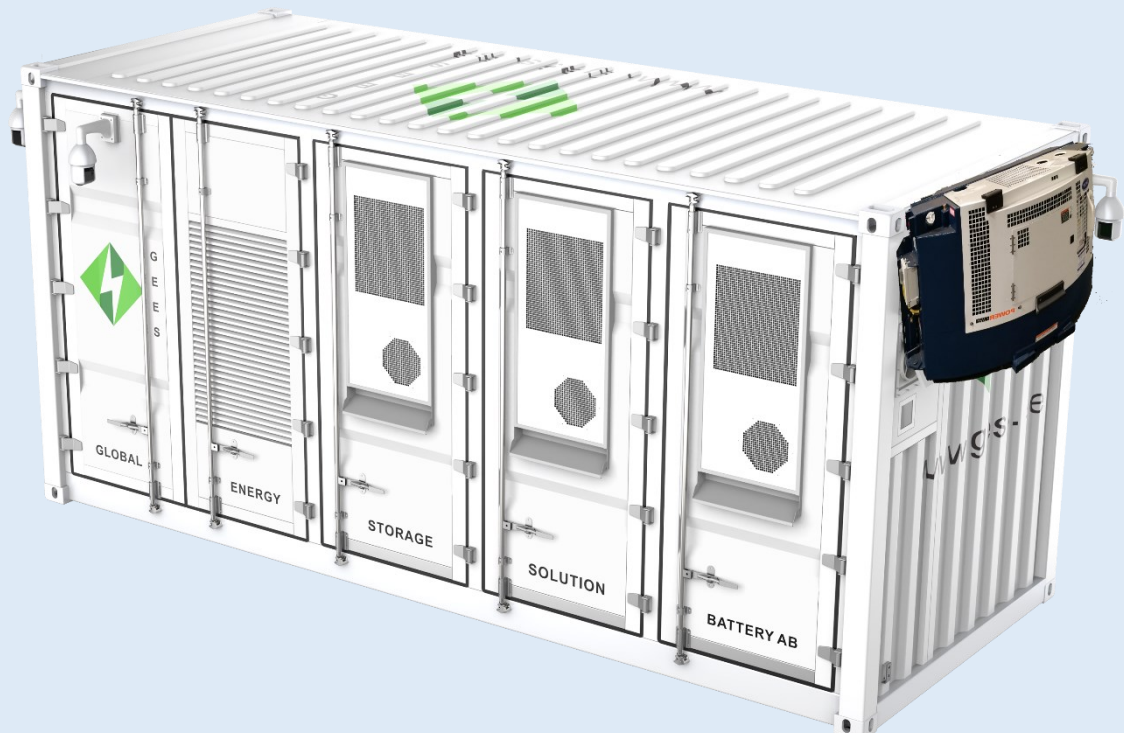
\*Optional features \* Specification can be changed without notice



**GESS-SW-2000TL-DC**



**GESS-SW-2000TL-DC side views**



**GESS-SW-2000TL-DC with Clip-On Genset attached**