

Manufacturer: Analysis for Salgenx Salt Water Battery

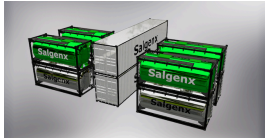
12,000 kW (12 MW) Battery System - Salgenx Salt Battery Technology

12/31/2022



S12MW: This system uses multiple tanks for electrolytes. Two dry containers for electrodes, command, and control.

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|--------------------|-----|--------|-----|------|------|-------|
| Battery Efficiency | .91 | | | | | |
| Energy Efficiency | 10 | mA/cm2 | 100 | A/m2 | 9.29 | A/ft2 |



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|------------------------|-------|---|--------|---|--------|----|
| Power Density (Wh/L) | 125.7 | x | 100000 | = | 12,570 | kW |
| kW loss per round trip | .91 | x | 12,570 | = | 1,131 | kW |

Manufacturer System Build Data: Note does not include Heat Pump thermal storage option

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|------------------------------|-------------|------|---------|------|--------|-------------|
| Materials Cost /kW | \$62,850 | = | \$5.00 | x | 12,570 | kW |
| Electrodes / Cost /kW | \$125,700 | = | \$10.00 | x | 12,570 | kW |
| Containers / Labor / System | \$240,000 | | | | | |
| Pumps / Controls / System | \$130,000 | | | | | |
| Charge Controller / Inverter | \$500,000 | | | | | |
| Fully Assembled Cost | \$1,058,550 | | | | | |
| Fully Assembled Cost / kW | \$84 | | | | | |
| Tax Credits | \$439,950 | unit | = | \$35 | /kW | x 12,570 kW |

| | |
|------------------|-------------|
| Mfg System Price | \$1,600,000 |
| Mfg Net Profit | \$541,450 |

Notes: System Sale Price : \$1,600,000 \$127 /kW

1. Charge Controller and Power Inverter are biggest cost. Source directly from manufacturer or change size to reduce costs.
2. Running one (1) cycle per day: Charge at night during off peak night, and then using stored battery power during on peak hours during the day.
3. Cogen Battery Thermal Savings: If a optional heat pump input with COP 3 is used during the evening, the heated water (salt water) can be used during the day, without effecting charge. This can result in large savings since a heat pump can produce significant savings while used off-peak, and storing heated liquid for later use.
4. Tesla MegaPack Comparison: 3,897 kWh. Price as of 5 October 2022 is \$2,414,070. \$619/kWh. Delivery Q3 2024 (two years). Annual maintenance is \$6,570 with price escalations. Price is for lithium ion battery pack with all inverters and ready to run. No thermal storage/access available. Reference: <https://www.tesla.com/megapack/design>