



TESLA

ENERGY GROUP



TESLA BESS SOLUTIONS

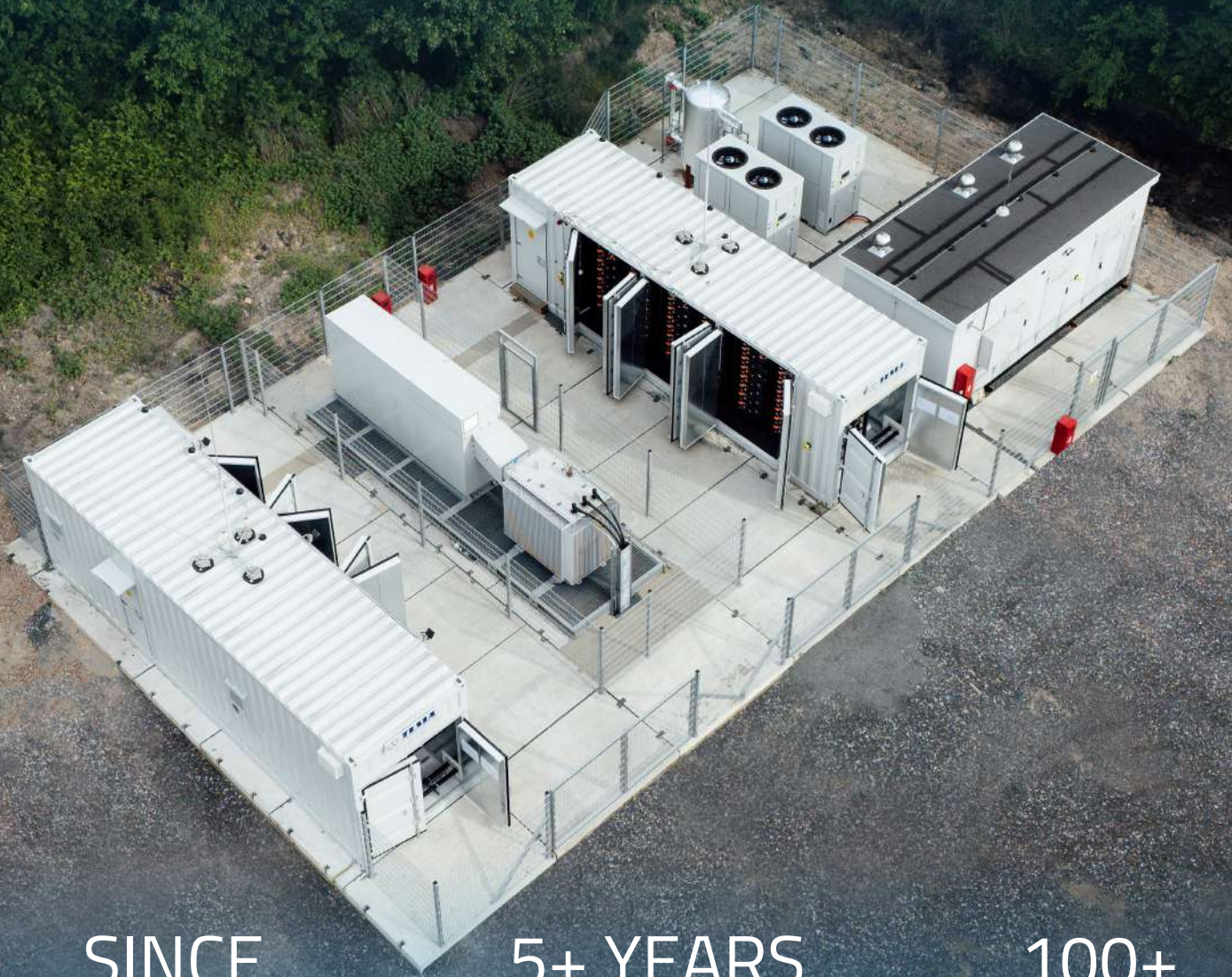
EMPOWERING ENERGY INDEPENDENCE
AND GRID FLEXIBILITY



member of  **TESLA**
ENERGY HOLDING



FROM DESIGN,
MANUFACTURING
TO COMMISSIONING &
OPERATION
WE HANDLE IT ALL.



SINCE
1946

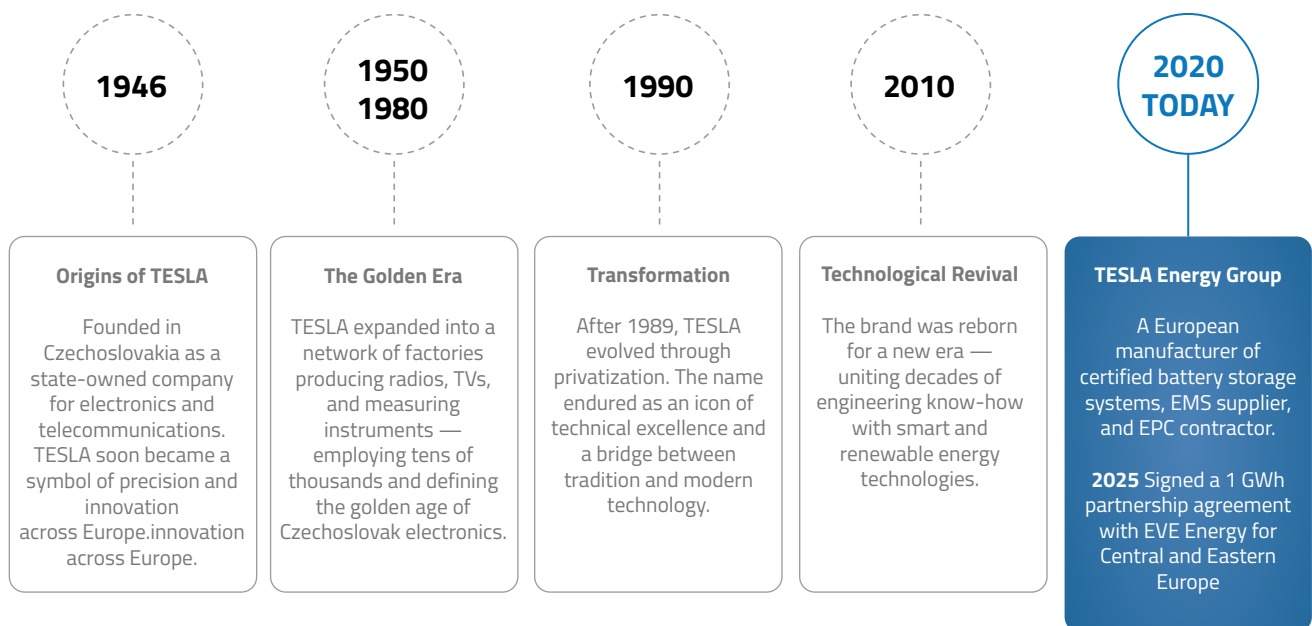
5+ YEARS
BESS

100+
MWh



TESLA | FROM RADIOS TO RENEWABLE ENERGY

Over 75 years of experience in Electronics



TESLA BESS (Battery Energy Storage Systems) bring intelligence, flexibility, and efficiency to how energy is stored and used — supporting green energy transitions, boosting grid stability, and unlocking the full potential of solar and wind.

**WE DON'T JUST STORE ENERGY.
WE SHAPE THE ENERGY FUTURE.**



WHY CHOOSE TESLA BESS

EMPOWERING RELIABILITY, QUALITY AND EUROPEAN INNOVATION

TESLA Energy Group combines decades of engineering expertise with modern energy technologies. From design and production to service and support we handle it all.

Key Advantages:

- ✓ European heritage since 1946 – proven tradition of engineering excellence
- ✓ Own manufacturing and R&D – TESLA Žilina & TESLA Liptovský Hrádok
- ✓ Comprehensive consulting & design – from concept to commissioning
- ✓ Certified safety & cybersecurity – UL9540A, IEC62619, ISO 27001
- ✓ Full after-sales service – own service teams and spare parts in stock
- ✓ Guaranteed response & delivery – fast replacement, no downtime
- ✓ 100+ MWh installed capacity across Europe



SAFETY



SERVICE



QUALITY



SUPPORT

FUNCTIONALITY OF TESLA BESS



PEAK SHAVING: Utilization of battery storage during peak load times, supplying electricity in parallel with the grid to meet energy demands. This helps reduce the reserved capacity, leading to savings on fixed monthly charges and avoiding overcapacity fees.



ENERGY TRADING: Charging the battery storage during periods of low electricity prices and utilizing it during high tariff periods, resulting in additional financial savings for the customer.



INTEGRATION WITH RENEWABLE SOURCES: The battery storage mitigates power fluctuations from renewable energy sources (e.g., due to weather conditions) and maximizes their utilization by storing excess energy during periods of higher generation relative to consumption.



BACKUP POWER SUPPLY: As a rapidly responding power source, the battery system provides instant power to support operations. When combined with external backup sources (such as cogeneration units, diesel generators), it significantly reduces the impact of unexpected grid failures.



FLEXIBILITY: Flexible charging and discharging to provide flexibility services (for electricity traders, aggregators, etc.).



OPTIMIZATION OF POWER QUALITY PARAMETERS: The battery storage minimizes adverse effects on power quality from both distribution and local networks, preventing technological failures or equipment damage.



WE SUPPORT YOU AT EVERY STEP:



1

Consulting Services:
Customized solutions based
on needs analysis

2

Business Case Development:
Cost-benefit analysis

3

Project Planning & Financing:
Value engineering, planning,
budgeting, and financing

4

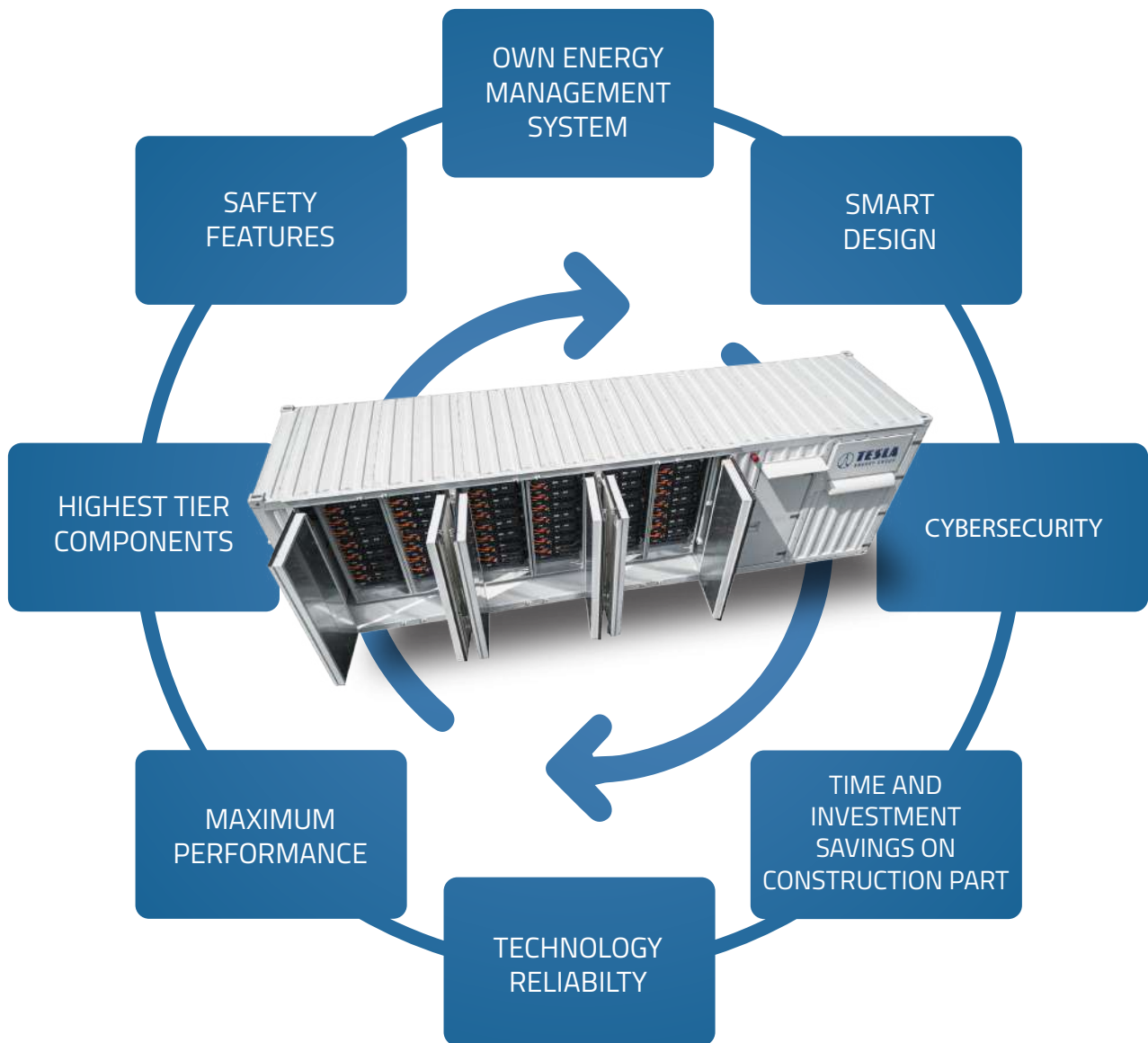
Turnkey Project
Implementation: Execution
and production start-up

5

Service Agreement: Training,
operation, and long-term
support

ENERGY INDEPENDENCE

THANKS TO OWN BATTERY ENERGY STORAGE SYSTEMS AND ENERGY MANAGEMENT.





TESLA BESS PRODUCT PORTFOLIO.

BASED ON:
HIGH-PERFORMANCE LFP BATTERY CELLS



ALL-IN-ONE

Commercial & Industrial BESS Cabinets



1

TESLA BESS Solution
100kW/233kWh



2

TESLA BESS Solution
125kW/261kWh



3

TESLA BESS Solution
62.5kW – 250kW/500kWh



TESLA BESS Solution

100kW/233kWh

1

Applications



Commercial



Industry



PV, Wind, Hydro

ENERGY SERVICES:

- ✓ Ancillary Services
- ✓ Flexibility Services

- ✓ Imbalance Management
- ✓ Peak Shaving
- ✓ Price Arbitrage

POWER	LIFETIME	CAPACITY	WARRANTY	INSTALLATION TIME	DIMENSIONS
100kW	10 000 cycles	233kWh	5+ years	<1 Day	1400 x 1350 x 2100 mm

Economical

- Highly integrated ESS for easy transportation and O&M.
- The integrated design allows the site to be quickly set up and used.

Liquid cooling

- The temperature deviance of battery cells in the whole system is within 2°C, due to intelligent liquid cooling system.
- It can expand the life time of the battery cells up to 20%

Safety

- The system has four levels management structure which can accurately provide short circuit protection, over current protection, over voltage protection, under voltage protection, over temperature protection, etc.



PRODUCT PARAMETER

Model	WH-TIANWU-100-233B
Battery Parameters	
Rated Capacity	233 kWh
Rated Voltage DC	832 V
Battery Type	LFP (from CATL)
Cell Specification	3.2 V 280 Ah
System Battery Configuration	1P*52S*5S
AC Parameters	
Rated Power	100 kW
Max. Output Power	110 kW
Rated Voltage AC	400 V, 3W+PE
Rated Frequency AC	50/60 Hz
Max. THD of Current	< 3% (at nominal power)
Power Factor	-1...+1
General Data	
Protection Level	IP55
Inverter Topology	Non-isolated
Operating Temperature Range	-20°C...+55°C (derating @ > 45°C)
Cooling Method	Air cooling (PCS) Liquid cooling (Battery)
Altitude	2000 m
Communication Protocols	Modbus, TCP/IP
Dimensions (W*D*H)	1400*1350*2100 mm
Weight	~2700 kg
Standard ¹	EMC, IEC 62619, EN 50549, G99, VDE4105, CEI016, CEI021, AS4777.2, C10/11, UL9540A, UN38.3



TESLA BESS Solution 125kW/261kWh

2

Applications



Commercial



Industry



PV, Wind, Hydro

ENERGY SERVICES:

- ✓ Ancillary Services
- ✓ Flexibility Services

- ✓ Imbalance Management
- ✓ Peak Shaving
- ✓ Price Arbitrage

CAPACITY
261 kWh

RATED VOLTAGE
400 V

CELL CAPACITY
314 Ah

WEIGHT
2,6t

DIMENSIONS
1000 x 1420 x 2250 mm

Intelligent and efficient

- With active/reactive power four quadrant adjustment function; Support grid voltage is 380/400 (-15%~15%) V; Controlling low harmonic; On-demand deployment, peak cutting and valley filling local automatic operation; Off-grid operation mode.

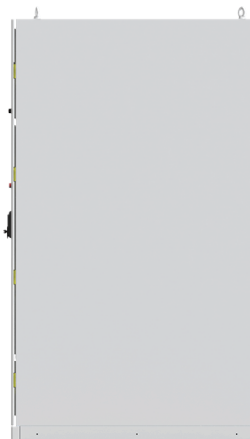
Flexible Arrangement

- Standardized interface; Support multi-machine parallel, Easy expansion; Overall extreme width size, Footprint reduction.

Extreme safety

- Battery PACK IP67 design; Packet fire protection; Reserve water fire ports; Multilevel fuse protection; Whole container flame retardant and explosion proof

The commercial and industrial energy storage solution we offer utilizes cutting-edge integrated energy storage technology. Our system is designed to enhance energy density and thermal performance, accelerate installation times, engineered for optimal serviceability, and minimizing capital expenditures (CAPEX).



PRODUCT PARAMETER

No.	Description	Value
		125 kW / 261 kWh
ESS PARAMETERS		
1.	PCS AC output power - setted	125 kW
2.	cos	0,1 ind. ÷ 1 ÷ 0,1 cap.
3.	Rated grid voltage	400 V (3W+N+PE)
4.	Rated frequency	50 Hz
5.	Installed capacity	261 kWh
6.	DoD	Max 95%
AiO EVE CABINET PARAMETERS 1pc 125 kW / 261 kWh		
SYSTEM		
1.	Dimension (wxdxh)	1000 x 1420 x 2250 mm
2.	Weight	≈ 2600 kg
3.	System efficiency	≥ 90% (aux. power excluded)
4.	IP level	IP55
5.	Rated charge/discharge	≤ 0,5P
6.	Operating temperature	-20 – 50 °C
7.	Noise level	≤ 73 dB @1m
PCS		
1.	Rated power	125 kW
2.	Rated grid voltage	400 V
3.	DC Voltage range	680 – 1000 V
4.	Max. efficiency	98,60%
5.	Cooling	Liquid cooling
6.	Operating temperature	-30 – 60 °C
7.	Dimension (wxdxh), weight	680x850x240mm, 124kg
8.	Certification	UL1741, IEEE1547, EN50549, EMC, LVD,VDE, AS4777
BATTERY		
1.	Cell type	MB31 (314Ah)
2.	Cell technology	LFP
3.	Moduly type	P531H202
3.	Battery module configuration	1P52S
4.	System configuration	1P260S
5.	Rated energy	261 kWh
6.	Nominal voltage	832 kWh
7.	Voltage range	650 - 949 V
8.	Operating temperature	0 – 55 (charge) -20 – 55 (discharge)
9.	Cooling	Liquid cooling
Expected lifetime@ DoD 90%, SoH 60%, 20 °C, 1 cycle/day, 0.5C		
10.	Expected number of cycles	7000
11.	Expected lifetime	Up to 20 years



TESLA BESS Solution

62.5kW – 250kW/500kWh

3

Applications



Commercial



Industry



PV, Wind, Hydro

ENERGY SERVICES:

- ✓ Ancillary Services
- ✓ Flexibility Services

- ✓ Imbalance Management
- ✓ Peak Shaving
- ✓ Price Arbitrage

POWER	LIFETIME	CAPACITY	WARRANTY	NOISE LEVEL	DIMENSIONS
62.5kW - 250kW	10 000 cycles	500kWh	5+ years	70 dB	2940 x 1500 x 2100 mm

Multi-Scenario Applications

- VDE 4110 certified for large-capacity grid compliance in Germany.
- Supports peak shaving, dynamic capacity expansion.
- Rapid grid response for frequency stabilization.

Completely Flexible

- Modular AC/DC design for flexible configurations and easy expansion.
- Supports 0.5C/0.25C/0.125C storage solutions for various applications.
- Cluster management reduces internal circulation, extending lifespan.

Reliable and Stable

- CATL 306Ah battery pack for high energy density and long cycle life.
- UL9540A certified with quadruple fire protection.
- Independent cluster control ensures uninterrupted operation during PCS failures.

User-Friendly

- Forklift or crane installation compatible.
- Side-by-side parallel setup and side cabling for seamless deployment.
- Wall-mounted liquid cooling, easy maintenance.
- Built-in protections against overcharge, over-discharge, and short circuits for worry-free use.



PRODUCT PARAMETER

Model	IA-62.5kW/500kWh-DA10	IA-125kW/500kWh-DA10	IA-187kW/500kWh-DA10	IA-250kW/500kWh-DA10
Battery (DC)				
Rated Energy	509 kWh			
Battery Type	306 Ah			
Rated DC Voltage	832 V			
DC Voltage Range	728...936 V			
Grid Connection (AC)				
Rated AC Power	62.5 kW	125 kW	187 kW	250 kW
Max. AC Power	62.5 kW	125 kW	187 kW	250 kW
AC Power Frequency	50/60 Hz			
Normal AC Voltage	400 Vac			
AC Voltage Range	360...440 V			
Grid Connetion Type	3W+N+PE			
THDi	< 3%			
Power Factor Range	-1...+1			
Max. Efficiency	98.5%			
General Data				
Dimensions (W*D*H)	1940*1500*2100 mm (Battery) 1000*1500*2100 mm (AC Side)			
Weight	~5.2 t			
Ingress Protection	IP55			
Anti-corrosion	C5			
Noise	70 dB			
Operating Relative Humidity	0%...100% (No condensation)			
Operating Temperature Range	-20°C...+55°C			
Cooling Method	Liquid cooling (Battery) Smart Fan (AC Side)			
Altitude	4000 m (@derating > 2000m)			
Communication	CAN, RS485			
Standard ¹	IEC62619, IEC63056, IEC62477, IEC61000, EN50549-10, VDE4110, UL9540A, UN38.3			

	IA-62.5kW/500kWh-DA10	IA-125kW/500kWh-DA10	IA-187kW/500kWh-DA10	IA-250kW/500kWh-DA10
Recommend Order Options	AC-62.5kW-1B10 DC-500kWh-EA10	AC-125kW-2B10 DC-500kWh-EA10	AC-187kW-1B10 DC-500kWh-EA10	AC-250kW-2B10 DC-500kWh-EA10



TESLA BESS PRODUCT PORTFOLIO.

BASED ON:
HIGH-PERFORMANCE LFP BATTERY CELLS



UTILITY-SCALE BATTERY STORAGE SOLUTIONS

1



TESLA BESS Solution
3344kWh

2



TESLA BESS Solution
4073kWh

3



TESLA BESS Solution
5015kWh



TESLA BESS Solution

3344kWh

1

Applications



PV, Wind, Hydro



Industry

ENERGY SERVICES:

- ✓ Ancillary Services
- ✓ Flexibility Services

- ✓ Imbalance Management
- ✓ Peak Shaving
- ✓ Price Arbitrage

CAPACITY
3344kWh

LIFETIME
10 000 cycles

NOISE LEVEL
75db

WARRANTY
5+ years

DIMENSIONS
6058 x 2438 x 2896 mm

High capacity, high integration

- Integrated with high-capacity EVE 628Ah cells, which offer a higher level of integration than 314Ah cells. The stacked cell design increases safety and extends lifespan by 20%...

40% reduction in electrical connection failures:

- 50% fewer battery cells, significantly reducing the number of internal welding points and cable connections.

+7% usable energy over the lifespan:

- Higher usable energy throughout the lifespan is enabled by the integration of a string PCS (power conversion system).

Highly durable construction: IP65 + C5-M anti-corrosion protection

- Designed for harsh environments, including islands, deserts, and mining sites.

Energy efficient, low noise

- A multi-mode liquid cooling system with top air discharge ensures lower energy consumption and reduced noise levels.

10% of total operation and maintenance (O&M) costs over the system's lifespan:

- 10% lower O&M lifecycle costs due to active balancing of the BMS system.

About 45% lower energy consumption:

- Natural cooling mode in low-temperature areas reduces the energy consumption of liquid cooling.



PRODUCT PARAMETER

No.	Description	Value
		1250 kW / 3344 kWh
ESS PARAMETERS		
1.	AC output power	1250 kW
2.	cos	0,1 ind. ÷ 1 ÷ 0,1 cap.
3.	Rated grid voltage	690 V
4.	Rated frequency	50 Hz
5.	Installed capacity	3344 kWh
6.	DoD	Max. 95%
7.	Auxilliary power supply for containers	3x230 / 400V, 50Hz
PCS		
1.	Model	PWX1-1250KTL-H-EX
AC		
2.	Rated AC power	1250 kVA
3.	Max. AC power	1375 kVA
4.	cos !	0,1 ind. ÷ 1 ÷ 0,1 kap.
5.	Rated grid voltage	690 V
6.	Grid Voltage range	690 V ± 10%
7.	Rated grid frequency	50 Hz
8.	I THD	< 3 %
DC		
9.	Rated DC current	1202 A
10.	DC voltage range	1040 ÷ 1500 V
General		
11.	Max efficiency	98,50%
12.	Cooling	Forced air cooling
13.	Operating temperature	-40 ÷ +60 °C (>55°C derating)
14.	Dimensions (w x d x h), weight	720 x 1600 x 2300 mm, 1400 kg
15.	IP protection	IP65
16.	Noise	75 dB
BATTERY CONTAINER ROCHE 3,3 MWh		
1.	Container configuration	4P416S
2.	Battery cell	EVE MB56 (628 Ah)
3.	Battery cell technology	LFP
4.	Battery modul configuration	1P52S
5.	Battery rack configuratiom	1P416S
Electrical parameters		
6.	Installed capacity	3344 kWh
7.	Rated DC voltage	1331,2 V
8.	DC voltage range	1164,8 ÷ 1497,6 V
9.	Max charge power	0.5P
10.	Max discharge power	0.5P
11.	Charge method	CC – CV
12.	Round Trip DC Efficiency	> 93 %
Mechanical parameters		
13.	Dimensions (w x d - h)	6058 x 2438 - 2896 mm
14.	Weight	34 t
15.	IP protection	IP55
Enviroment		
16.	Operating temperature	-30 ÷ 55 °C (discharge) 0 ÷ 55 °C (charge)
17.	Humidity	< 95 %
18.	Battery cooling	Ethylen glycol 50 %
Expected lifetime@ DoD 90%, SoH 60%, 20 °C, 1 cycle/day, 0.5C		
19.	Expected number of cycles	7000
20.	Expected lifetime	Up to 20 years

TESLA BESS Solution

4073kWh

2



Applications



PV, Wind, Hydro



Industry

ENERGY SERVICES:

- ✓ Ancillary Services
- ✓ Flexibility Services

- ✓ Imbalance Management
- ✓ Peak Shaving
- ✓ Price Arbitrage

CELL CAPACITY 628Ah	LIFETIME 10 000 cycles	CAPACITY 5015kWh	WARRANTY 5+ years	PROTECTION IP55	DIMENSIONS 2438 x 6058 x 2896 mm
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Super-large cell, ultra-high energy efficiency

- Innovative current collection technology, realizing low temperature rise and high energy efficiency.
- Low internal resistance combined with optimized overcurrent design.
- Self-developed BMW active balancing, improving the consistency.

Minimalist integration smart use

- Complete service capabilities along the entire product chain Minimalist integration of super-large cells, making O&M simpler.
- Cell-level AI intelligent perception and cloud diagnosis, realizing easy O&M.

Safety

- Reliable cell design, ensuring intrinsic safety
- System safety ensured from firefighting and electrical
- Full-link verification, passing 300+ safety and electrical performance tests.



PRODUCT PARAMETER

Cell	
Item	Specification
Cell Model	MB30
Nominal Capacity	306Ah
Dimension(D×W×H)	72×174×207mm
Weight	5600g±300g
Energy Density	175Wh/kg
Rated Voltage	3.2V
Voltage Range	2.5V~3.65V
Operating Temperature	Charge:0~60°C Discharge:-30~60°C

Battery Module		Energy Storage System	
Item	Specification	Item	Specification
Pack Model	P530H201	System Model	S430H201
Dimension(D×W×H)	1160×780×240mm	Dimension(D×W×H)	2438×6058×2896mm
Weight	345kg	Weight	~37t
Configuration	1P13S	Configuration	1P416S×10
Rated Energy	50.9kWh	Rated Energy	4073kWh
Voltage Range	130V-189.8V	Voltage Range	1164.8V~1497.6V
Rated Voltage	166.4V	BMS Communication	CAN/LAN
Standard Charging and Discharging Rate	0.5P	Anti-corrosion Grade	C4
Thermal Management	Liquid Cooling	Standard Charging and Discharging Rate	0.5P
Charging Operating Temperature	0°C~55°C	Thermal Management	Liquid Cooling and Heating
Discharging Operating Temperature	-20°C~55°C	Operating Temperature	-30°C~60°C
Level of Protection	IP67	Relative Humidity	Storage: <85%RH (no condensation) Operating: <95%RH (no condensation)
Certification	UN38.3, UL9540A	Level of Protection	IP55
		Fire Suppression System	Water Firefighting (with gas fire suppression as option)



TESLA BESS Solution 5015kWh

3



Applications



PV, Wind, Hydro



Industry

ENERGY SERVICES:

- ✓ Ancillary Services
- ✓ Flexibility Services

- ✓ Imbalance Management
- ✓ Peak Shaving
- ✓ Price Arbitrage

CELL CAPACITY
628Ah

LIFETIME
10 000 cycles

CAPACITY
5015kWh

WARRANTY
5+ years

PROTECTION
IP55

DIMENSIONS
2438 x 6058 x 2896 mm

Super-large cell, ultra-high energy efficiency

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- Cell-level AI intelligent perception and cloud diagnosis, realizing easy O&M.

Safety

- Reliable cell design, ensuring intrinsic safety
- System safety ensured from firefighting and electrical
- Full-link verification, passing 300+ safety and electrical performance tests.



Minimalist integration of super-large cells, making O&M simpler

More efficient design and installation, reducing the maintenance labor cost by 30%



Four machines in one A/B cabinet, reducing the floor area by

25% ↓



Reducing the labor cost of maintenance and repair in the whole life cycle by

25% ↓

PRODUCT PARAMETER



Item	Specification
Model	P156H201
Rated Energy	104,4kWh
Dimension(D×W×H)	2195.5×785×254mm
Weight	700±10kg
Rated Voltage	166.4V
Voltage Range	145.6V ~ 187.2V
Standard Charging and Discharging Rate	0.5P
Operating Temperature	Charge:0~55℃ Discharge:-30~55℃
Level of Protection	IP67



Item	Specification
Model	MB56
Nominal Capacity	628Ah
Dimension(D×W×H)	72×352×207mm
Weight	11 500 ± 300g
Energy Density	175Wh/kg
Rated Voltage	3.2V
Production Process	Stacking
Voltage Range	2.5V~3.65V
Operating Temperature	Charge: 0 ~ 60℃ Discharge: 30 ~ 60℃



Item	Specification
Model	S556H201 (UL)
Rated Energy	5015kWh
Dimension(D×W×H)	2438×6058×2896mm
Weight	<45t
Rated Voltage	1331.2V
Voltage Range	1164.8V-1477.6v
Standard Charging and Discharging Rate	0.5P
Operating Temperature	-30℃~55℃
Level of Protection	IP55



CUSTOMIZED ENERGY STORAGE SOLUTIONS.

TAILOR-MADE EUROPEAN BESS SOLUTIONS
DESIGNED AND BUILT IN TESLA ŽILINA
AND TESLA LIPTOVSKÝ HRÁDOK



Every project has its own energy story - and TESLA builds the system to match it. With in-house design, engineering, and production, **TESLA Energy Group** delivers fully customized **Battery Energy Storage Systems (BESS)** that perfectly fit the customer's requirements, operating conditions, and grid connection parameters.

Our portfolio covers scalable solutions **from 50 kW up to multi-megawatt installations exceeding 100 MW**, enabling energy optimization, trading, and ancillary services.

Each project is designed from the ground up - choosing the most suitable battery technology, PCS type, EMS platform, and control integration to ensure long-term reliability and performance.

TESLA also provides **flexibility in battery cell configurations**, offering multiple cell capacities and energy densities - **280 Ah, 306 Ah, 314 Ah, and 628 Ah** - to perfectly match the customer's technical and operational requirements.

As a **specialist in indoor BESS installations**, TESLA designs compact, safe, and high-performance systems for industrial and commercial buildings, where space optimization, thermal management, and acoustic performance are crucial.

We proudly **develop and deliver TESLA BESS Indoor Solutions - a unique European Solutions that no Chinese supplier can offer**. This is our **distinct competitive advantage**: European engineering quality, local production, full certification, and design flexibility tailored to complex indoor environments.

Key Advantages

- **Customized design** from 50 kW to multi-MW scale
- Smart thermal management with **liquid cooling**
- **Flexible configuration** using various battery and inverter technologies
- Seamless integration with **TESLA EMS** and local **SCADA systems**
- Full **EU design, assembly, testing, and certification**
- Proven expertise in **indoor BESS application**



GamesaElectric
POWER

CONVERSION SYSTEMS.



SINEXCEL





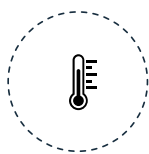
Manufacturer	Power Electronics	Gamesa Electric	NR Electric	Megarevo	Sinexcel
Nominal Power 40°C	1525 / 1590 / 1685 / 1910 / 1955 / 2005 / 2055 / 2101 / 2195 / 2290 / 2385 / 2530 / 2865 / 2935 / 3005 / 3055 / 3080 / 3151 / 3180 / 3290 / 3370 / 3820 / 3915 / 4010 / 4105 / 4200 / 4390 kW	2425 / 2910 / 3152 / 3637 / 3819 / 4000 / 4183 / 4365 / 4607 / 4910 / 5153 kW	1000 / 1250 / 1375 / 1575 / 1750 / 3450 kW	500 / 630 kW	215 / 430 / 645 / 860 / 1075 / 1290 / 1505 / 1725 kW
AC voltage output	480 / 500 / 530 / 600 / 615 / 630 / 645 / 660 / 690 V +- 10%	400 / 480 / 520 / 600 / 630 / 660 / 690 / 720 / 760 810 850 V +- 15%	400 / 500 / 550 / 630 / 690 V +- 10%	400 V +- 15%	690 +- 15%
Nominal frequency	50 Hz	50 Hz	50 Hz	50 Hz	50 Hz
Max load capability	100%	100%	100%	100%	100%
Efficiency	98,76%	98,57%	98,48%	98,70%	98.5%
Power factor (adjustable)	-0,5 + 0,5	-1 + 1	-0,9 + 0,9	-1 + 1	-0,9 +0,9
Functionalities	Modularity, advanced grid support, compatible with all battery types.	Grid forming, black start, synthetic inertia, weak grid/micro-grid operation.	Typical applications – energy shifting, peak shaving, grid-forming, V/F regulation.	PV charging station, Wind power storage, Grid-side storage, Combined thermal power FM.	Grid-support function, automatic operation strategy of peak shaving and load shifting.
Dimensions (W x D x H)	3 x 2 x 2,2 m	4,325 x 2,255 x 1,022 m	1,2 x 2,35 x 1,45m / 2,2 x 2,37 x 1,25m	1 x 0,7 x 2,05 m	2,2 x 2,16 x 1,3 m
Weight	5200kg / 5350kg / 5500kg	4535kg	1600kg / 2800 kg	950 kg	1549kg / 1642kg / 1735kg / 1828kg / 1921kg / 2014kg / 2107kg / 2200kg
Certification	UL1741, IEC62109-1, IEC62109-2, NEC2020, IEC62116	UL1741, IEC62109-1, IEC62109-2, NEC2020, IEC62116	UL1741, IEC62477, IEC61000, IEC61683, IEEE519, EN50549	EC/EN62109-1/-2, IEC/EN 62477-1, IEC/EN 61000-6-2, IEC/EN 61000-6-4, CGC	UL1741, IEEE1547, CSA C22.2



SAFETY & CYBERSECURITY

Your energy protected at every level

TESLA BESS systems feature a multi-layered safety architecture and full cybersecurity compliance.



Cell-level
temperature and
pressure sensors



Pack-level smoke
and gas detection



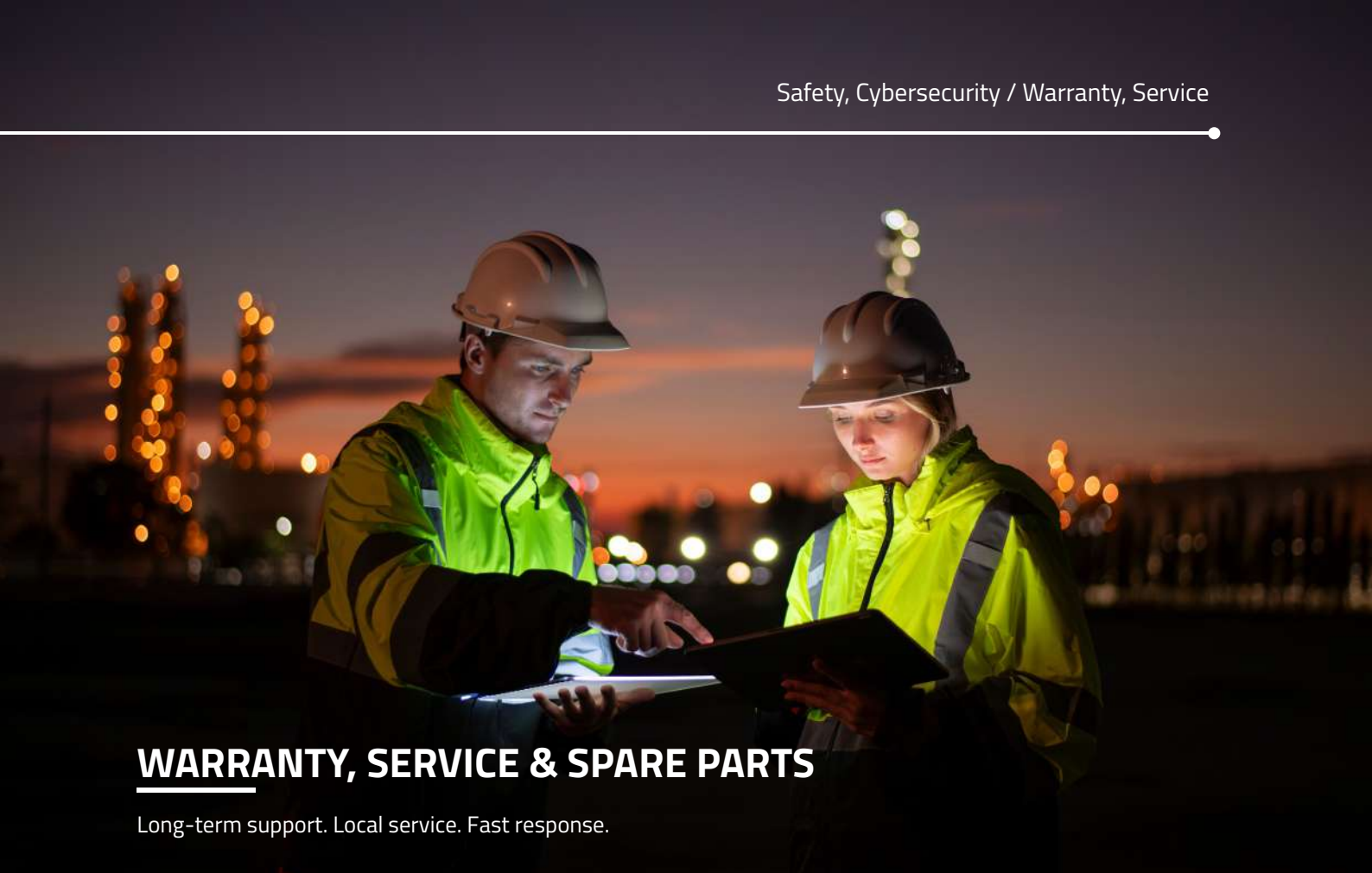
System-level fire
suppression
(aerosol, sprinklers,
venting)



Automatic
disconnection and
alert protocols

Cybersecurity & Certifications:

- ISO 27001 certified EMS & data protection, UL9540A, EN 50549-2, IEC 62619
- Real-time 24/7 remote monitoring & alerts
- Encrypted Modbus TCP/IP communication



WARRANTY, SERVICE & SPARE PARTS

Long-term support. Local service. Fast response.

We ensure maximum uptime with its dedicated service network and stocked spare parts in Central Europe.

What we guarantee:



24 h response
time within
service regions



Preventive
maintenance &
remote
diagnostics



Certified
technicians and
original spare
parts



Warranty up to
10 years



Predictive
monitoring
integrated in
EMAN24



OUR SERVICE HUBS

PRAGUE

ŽILINA

L. HRÁDKO



TESLA COMMITMENT & SUSTAINABILITY

Innovating responsibly. Powering a cleaner future.

At TESLA Energy Group, sustainability is not a slogan — it's a standard. All our products are designed and manufactured in compliance with European environmental and recycling regulations.

The company follows established management systems and ISO standards:

ISO 9001: Quality Management System
ISO 14001: Environmental Management System
ISO 27001: Information security, cybersecurity, and privacy protection
ISO 45001: Occupational health and safety management system

Our battery storage solutions comply with the following standards:

Batteries:
EN 61000-6-2:2005, EN 61000-6-4:2007+A1, IEC 62619:2017

Inverters:
EN 62477-1, EN 61000-6-2, EN 61000-6-4, EN 50549-2, -10, EN 62109-1, -2

RoHS certificates:
IEC 63000-2016, EN50581

KEY PARAMETERS FOR INVESTORS

Technical reliability meets financial confidence

Parameter	Value	Note
Battery Type	LFP (LiFePO)	Proven chemistry, safe operation
System RTE (Efficiency)	Up to 94%	End-to-end
Cycle Life	up to 10 000 @ 80–90 % DOD	Long lifespan
Response Time	< 10 ms	EMS / UPS ready
Warranty	Up to 10 years	Depending on model
Cybersecurity	ISO 27001 certified	Secure EMS
Certifications	UL9540A / EN50549 / CE	Grid compliant
Cooling	Liquid	Intelligent thermal control
Fire Safety	Multi - level	Sensors + sprinklers + aerosol



CONTROL SOFTWARE.



EMAN24

member of



TESLA
ENERGY HOLDING



EMAN24

The EMAN24 control software is an invaluable tool for modern energy systems, bringing a range of benefits and contributing to efficient and sustainable energy management.

With advanced features and capabilities, EMAN24 is the ideal solution for industrial sites, commercial buildings and energy parks. With EMAN24, you can be sure that your energy system will operate at the highest level of efficiency and reliability.



BENEFITS

- It optimizes energy flows in the area
- It reduces the cost of electricity consumption
- In cooperation with BESS, it allows to reduce invoicing for reserved capacity from the distribution company
- It comprehensively manages the operation from an energy point of view
- It visualizes the energy balance of the area and all measured devices
- It reduces costs for reserved capacity and its excess. It uses renewable energy sources (FVE, MVE, KGJ, etc.)
- Provides balance sheets and reports



**Manual control
BESS**



**Smart BESS
management**
and production source



Backup Supplying
the area in case of a power
outage



D+1 planner
to optimize the operation of
BESS



Prediction of consumption
using artificial
intelligence



SPOT management BESS
based on hourly electricity prices



**Consumption
peak-shaving**
(monitoring of exceeding the
power limit for taking from the
network)



**Supply
peak-shaving**
(monitoring of exceeding the
power limit for overflows to the
network)



Customization of BESS
running profiles for working and
non-working days



Monitoring and export
of electrical equipment data
from the entire system



Load shifting
enables smart shifting of pumped
and supplied energy for a
consumption point over time



Arbitrage
allows the deployment of
resources according to the
currently most favorable prices



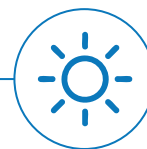
REFERENCES.



WE OPERATE BESS WITH CONNECTION TO:



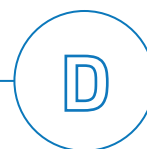
PV



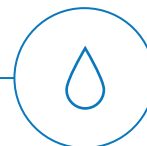
WIND POWER PLANTS



DIESEL



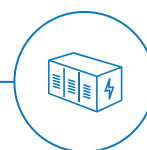
HYDROPOWER PLANTS

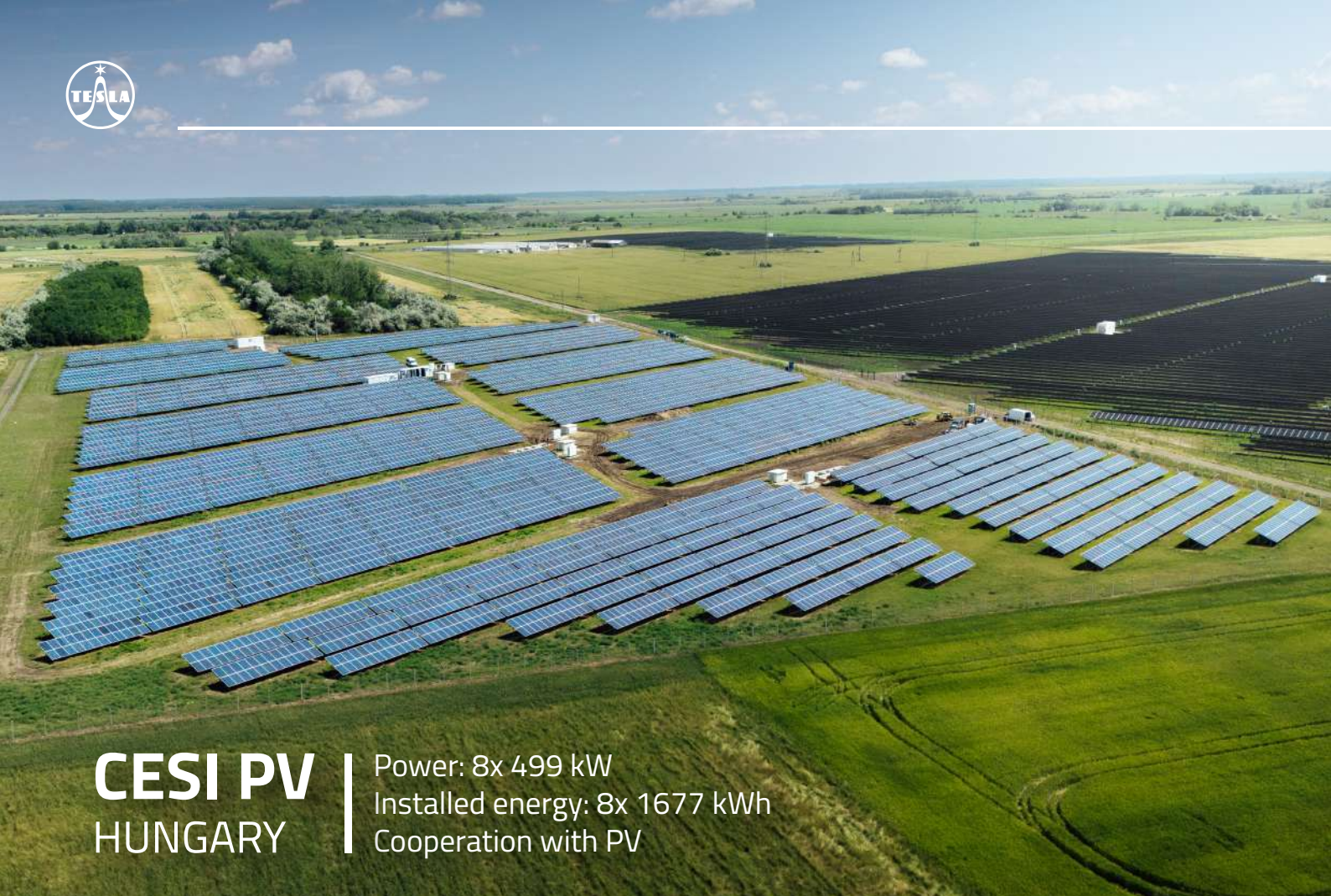


PHYTOMASS BURNING



STAND-ALONE BESS





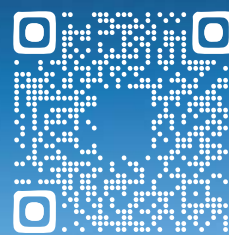
CESI PV HUNGARY

Power: 8x 499 kW
Installed energy: 8x 1677 kWh
Cooperation with PV



BESS KUŘIM CZECH REPUBLIC

Power: 3000 kW
Installed energy: 6709 kWh
BESS for ancillary services



SCAN FOR CHECK OUR
COMPLETED PROJECTS

WIND PARK CZECH REPUBLIC

Power: 3x 1000kW
Installed energy: 3x 2236 MWh
Operational cooperation with the wind turbine

BESS V. BÍTEŠ CZECH REPUBLIC

Power: 10 000 kW
Installed energy: 26 820 kWh
Stand - alone BESS



HYDRO POWER PLANT

SLOVAKIA

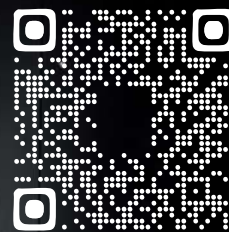
Power: 550 kW
Installed energy: 1118 kWh
Hydro power plant



INDUST. PARK

CZECH REPUBLIC

Power: 4 000 kW
Installed energy: 4 477 kWh
Gas turbine power plant



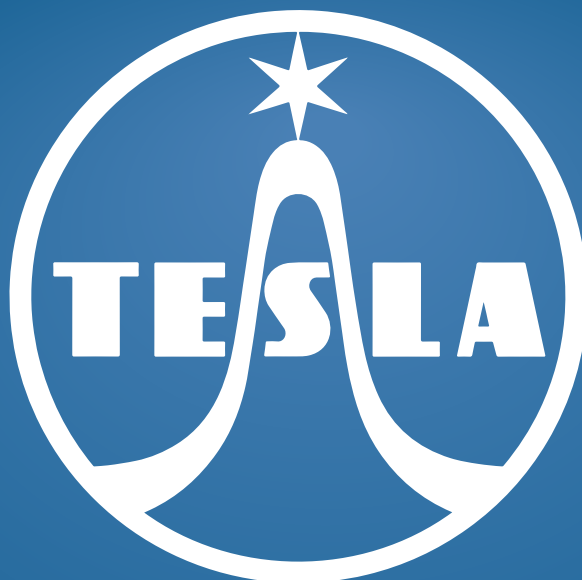
SCAN FOR CHECK OUR
COMPLETED PROJECTS

INDUST. PARK SLOVAKIA

Power: 3780 kW
Installed energy: 5590 kWh
Biggest indoor BESS in middle Europe

INDUST. PARK CZECH REPUBLIC

Power: 200 kW
Installed energy: 466 kWh
Cooperation with PV + PEAK SHAVING



TESLA Energy Group a.s.:

is committed to environmental responsibility and compliance with legislative obligations—pricing includes a recycling fee in accordance with Act No. 79/2015 Coll. on Waste Management.

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ISO 14001: Environmental Management System

ISO 27001: Information security, cyberscurity, and privacy protection

ISO 45001: Occupational health and safety management system

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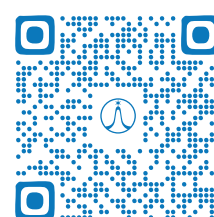
RoHS certificates: IEC 63000-2016 EN50581



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 **SCAN ME**



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