

www.lindemann-regner.de LINDEMANN-REGNER www.lindemann-regner.de

COMPANY PROFILE

LINDEMANN - REGNER (Headquartered in Munich, Germany)

- is a global manufacturer of transformers and solid-state transformers (SST),
The company represents top-level quality in the European power engineering industry.

With profound technical expertise and rigorous quality standards, Lindemann-Regner has set a benchmark for precision and reliability in electrical manufacturing. The company operates a joint production center in Jiangsu Province, China, establishing a globally integrated model of "German headquarters + Chinese production." This approach combines German engineering excellence with flexible, globally oriented manufacturing and service

CORE BUSINESS



Power Infrastructure Solutions company specializes



European / Middle Eastern Key Markets

EPC Services

The EPC business provides full-cycle services from load calculation, system design, equipment selection, and standardized installation to commissioning, operation, and acceptance. These services cover a wide range of applications including renewable energy integration, grid modernization, industrial high-reliability power distribution, and commercial power supply systems. This approach helps shorten project timelines and reduce coordination costs. For the European market, CE and EN standards are strictly followed, while for the Middle East market, special emphasis is placed on high-temperature endurance and sand-resistance design. Multiple benchmark projects have been successfully delivered.

Power Equipment Manufacturing

The product range includes transformers, power distribution systems, and other key electrical components. All products are developed and manufactured according to international standards, ensuring high efficiency, reliability, and operational safety.



PHILOSOPHYCORPORATE

Based on the principle of "German standards and global collaboration," Lindemann-Regner provides integrated power solutions covering product development, manufacturing, engineering, and project execution.

The company aims to contribute to global energy transformation and grid modernization, becoming a reliable partner in international power infrastructure development.



Transformers: Oil-immersed and dry-type transformers compliant with DIN 42500 and IEC 60076 standards, featuring high reliability, low losses, and long service life. Rated capacities range from 100 kVA to 200 MVA with voltage levels from 400 V to 430 kV.

MegaCubeTM: An integrated, independent pre-installed energy storage system combining E-House (prefabricated cabin) and containerized battery cabinets, with core component integration, wiring and commissioning completed in-factory. Compliant with mainstream EU/US wiring standards and communication protocols for compatibility and reliability. On-site, no complex wiring/commissioning-basic installation enables "plug-and-play", ensuring efficient deployment and a revolutionary solution for energy storage project

Distribution Systems: E-houses, ring main units, and high and low-voltage switchgear compliant with EN 62271, characterized by intelligent control, modular design, and high operational safety.

Other Products: AIDC power supply systems, control and monitoring units, and solid-state transformers designed to cover multiple stages of the power system chain.

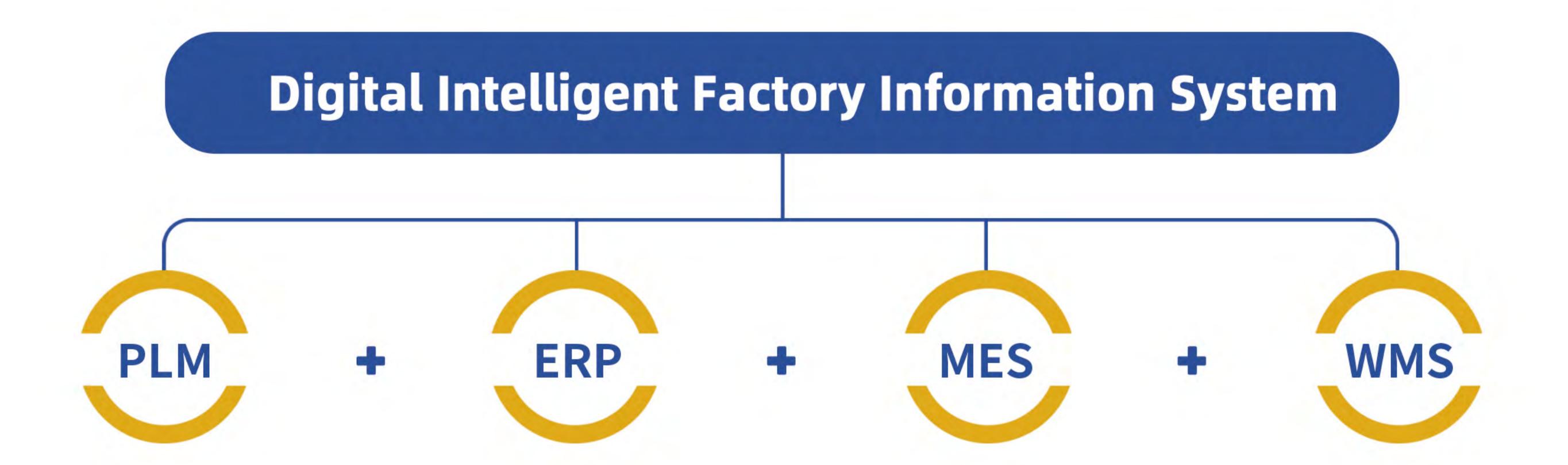
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MES "INTELLIGENT BRAIN"

Enhance efficiency and monitor production in real time

The equipment has been integrated with SAP, PLM and MES systems to ensure the balance of production processes and material flow, further improving efficiency, quality and fulfillment capabilities. To break through the efficiency bottlenecks in the entire chain from "design - production - management and control", the company achieves multi-level optimization through multi-system interaction. Design data is directly connected to production, eliminating the need for paper-based transmission of BOM and process routes. PLM and 3D software enable automatic processing by equipment, achieving seamless integration between design and manufacturing. In terms of production planning, MES decomposes the main plan from ERP into three-level online plans, and APS automatically generates work orders and intelligently selects materials, enhancing efficiency and reducing inventory. On-site management is facilitated by the informatization of production lines and WMS systems, accelerating operations and material transfer, and ensuring full control over production scheduling, logistics and execution, significantly improving operational efficiency.



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CORE PROCESSES

CORE TECHNOLOGY FOR TRANSFORMERS



Silicon steel transverse cutting / fully automated transverse cutting line



Silicon steel longitudinal cutting / fully automated longitudinal cutting line



Core stacking / fully automatic robotic stacking system



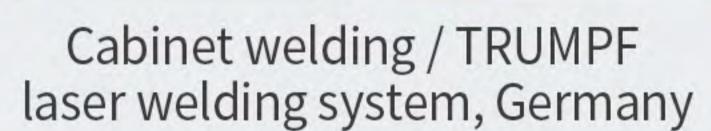
Winding casting / intelligent vacuum casting system

CORE PROCESSES FOR RING MAIN UNITS (RMU)



Cabinet assembly / fully automated assembly and production line







Cabinet cutting / TRUMPF laser cutting system, Germany



Gas leakage inspection / SEILER automatic helium leak detection system, Germany

STANDARDS COMPLIANCE & CERTIFICATION

Supported by an intelligent, process-controlled manufacturing system and comprehensive final testing at the intelligent inspection center, all products are guaranteed to comply with German standard DIN 42500 and international quality standard IEC 60076.

































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MEDIUM VOLTAGE CABINET/RING MAIN UNIT

Clean Air Ring Main Unit (RMU)

Voltage: 12/24 kV

Power: 630 A

LE-RMU-ARI Ring Main Unit













Product Introduction

The LE-RMU-ARI Series Clean Air Insulated Ring Main Unit (RMU) is a newly developed switchgear based on years of experience in designing and manufacturing fully gas-insulated systems, combined with advanced international technology.

Utilizing clean air insulation and vacuum arc extinguishing technology, it represents a new generation of environmentally friendly medium-voltage switchgear.

Its innovative design concept and advanced global manufacturing process ensure outstanding performance throughout the entire lifecycle—from production, operation to end-of-life recycling-embodying the principles of energy efficiency and sustainability.

Compact, maintenance-free, easy to operate, and highly reliable, the LE-RMU-ARI provides an ideal green and energy-saving alternative to SF6-insulated and solid-insulated switchgear for modern power distribution networks.

Operating Environment

- Altitude: 2000 m and below (for installations above 2000 m, please contact the manufacturer for customized
- design) Maximum ambient temperature: +55°C
- Minimum ambient temperature: –25°C
- Solar radiation intensity: 0.1 W/cm² (wind speed: 0.5 m/s)
- Maximum daily temperature variation: 25 K
- Indoor relative humidity: daily average ≤95%, monthly average ≤90%
- Maximum wind speed: 35 m/s (note: wind speed refers to the 10-minute average at 10 m above ground level)
- Load condition: simultaneous occurrence of 10 mm ice coating and 17.5 m/s wind speed
- Seismic resistance: horizontal ground acceleration 0.2 g, vertical acceleration 0.1 g acting simultaneously. Tested using resonance, sinusoidal, and beat-wave methods: 5 excitations, 5 waves each, with 2 s intervals.
- Safety factor not less than 1.67. The induced electromagnetic interference voltage in the secondary system shall not exceed 1.6 kV.

Technical Features

- All high-voltage live parts are completely sealed in a stainless steel gas tank, using clean air as the insulation medium between phases, to ground, and in isolation compartments. The entire switchgear is unaffected by external environmental conditions. Circuit breaker, load switch, and earthing operations all use vacuum interrupters. The vacuum circuit breaker unit replaces the traditional load switch + fuse combination, enabling fault interruption at an early stage. A dedicated pressure relief channel can discharge high-temperature and high-pressure gas safely outdoors, ensuring reliable and maintenance-free operation throughout the product's lifetime.
- Compact structure and small footprint, suitable for installation in space-constrained locations.
- The gas tank is made of 3 mm 304 stainless steel and processed with TRUMPF laser cutting and welding machines from Germany. It withstands internal pressure up to 0.24 MPa, ensuring personnel and equipment safety during internal arc faults. Excellent gas tightness and a refined appearance.
- Gas tanks are tested and filled using SEILER's fully automated helium leak detection and gas-filling systems from Germany, ensuring a leakage rate ≤0.1% per year and clean air purity of 99.99%. The design guarantees a service life of up to 40 years.
- Modular design with multiple configuration options single-tank or combined units, with side or top extensions, or both. The extension busbars are fully enclosed and coated with conductive paint for grounding, ensuring safety and reliability.
- Mechanical and electrical interlocks provide dual protection, preventing faults due to misoperation.
- Mechanical endurance: vacuum circuit breaker 10,000 operations; load switch 5,000 operations; three-position (isolation/earthing) switch – 3,000 operations; earthing switch – 5 short-circuit making operations.
- Equipped with advanced temperature rise and gas density monitoring devices, current/voltage monitoring system, and automation solutions enabling unattended substation operation and full SCADA ("Five Remote") functionality.
- Manufactured in clean workshops with fully automated assembly lines and complete factory testing equipment, ensuring consistent product quality and reliability.

Technical Parameters

LE-RMU-AIR-12 kV 630A	Unit	Vacuum Circuit Breaker Panel	Load Break Switch Panel
Rated voltage	kV	12	
Rated frequency	Hz	5	0
Rated power frequency withstand voltage (1min)	kV	42,	/48
Rated lightning impulse withstand voltage (peak)	kV	75	/85
Rated current	Α	630	630
Main and Earthing Circuit Short-time Withstand Current (3 s) (peak)	kA	20/50	20/50
Earthing Connection Short-time Withstand Current (2 s) (peak)	kA	17.4/43.5	17.4/4
Main Circuit Short-circuit Making Current (peak)	kA	50	50
Earthing Circuit Short-circuit Making Current (peak)	kA	50	50
Rated short-circuit breaking current	kA	20	
Rated cable charging breaking current	Α		40
Rated earth fault current	Α		120
Earth fault cable charging current	Α		69.3
Mechanical Endurance	Times	10000	10000
Electrical Endurance	Level	E2	E3
Internal Arc Class	kA/s	20/0.5	20/0.5
Annual Gas Leakage Rate	V/V	≤ 0.01%	
Gas Tank Protection Degree	IP	IP67	
Enclosure Protection Degree	IP	IP4X	

Technical Parameters

LE-RMU-AIR-24 kV 630A	Unit	Vacuum Circuit Breaker Panel	Load Break Switch Panel
Rated voltage	kV	24	
Rated frequency	Hz	50/60	
Rated power frequency withstand voltage (1min)	kV	50/60	
Rated lightning impulse withstand voltage (peak)	kV	125/145	
Rated current	Α	630	630
Main and Earthing Circuit Short-time Withstand Current (3 s) (peak)	kA	21 / 54.6	21 / 54.6
Earthing Connection Short-time Withstand Current (2 s) (peak)	kA	21 / 54.6	21 / 54.6
Main Circuit Short-circuit Making Current (peak)	kA	54.6	54.6
Earthing Circuit Short-circuit Making Current (peak)	kA	54.6	54.6
Rated short-circuit breaking current	kA	21	
Rated cable charging breaking current	Α	31.5	16
Rated earth fault current	Α		48
Earth fault cable charging current	Α		27.7
Mechanical Endurance	Times	10000	5000
Electrical Endurance	Level	E2	E3
Internal Arc Class	kA/s	21/1	21/1
Annual Gas Leakage Rate	V/V	≤ 0.1%	
Gas Tank Protection Degree	IP	IP67	
Enclosure Protection Degree	IP	IP54/IP4X	

MEDIUM VOLTAGE CABINET/RING MAIN UNIT SF6 Ring Main Unit

Voltage: 12/24/40.5 kV

Power: 630 A













Product Introduction

The LE-RMU-SF6 Series SF6 Gas-Insulated Ring Main Unit (hereinafter referred to as RMU) is the latest generation of 12/24 /40.5 kV SF6 gas-insulated modular switchgear, available in both extensible and compact configurations.

The product integrates advanced international design concepts, precision manufacturing processes, and state-of-the-art global production technology.

Key features include a compact structure, minimal maintenance requirements, easy operation, and excellent electrical and mechanical performance with high reliability.

The LE-RMU-SF6 is widely applied in commercial and industrial power distribution systems, high-rise buildings, outdoor switchgear installations, and prefabricated substations.

The LE-RMU-SF6 Series RMU has successfully passed type tests conducted by XIHARI and ASTA, ensuring full compliance with international standards.

Operating Environment

Ambient Temperature:

- Maximum ambient temperature: +60°C
- Minimum ambient temperature (indoor): –40°C

Ambient Humidity:

- 24-hour average ≤95%
- Monthly average ≤90%
- Altitude ≤4500 m

Atmospheric Conditions:

Unaffected by pollution, dust, corrosive or flammable gases, smoke, or other environmental factors.

Technical Features

- All primary high-voltage live parts are completely sealed in a stainless-steel gas tank, fully welded and protected from external environmental influences, ensuring operational reliability, personnel safety, and maintenance-free performance.
- Compact structure, easy to install in space-constrained environments.
- The stainless-steel gas tank is made of 3 mm 304 stainless steel and welded using advanced 3D five-axis laser welding systems from Germany's TRUMPF company, ensuring superior weld quality, excellent gas tightness, and a refined appearance.
- The tank is tested with SEILER's fully automatic helium leak detection system from Germany, ensuring a leakage rate of <0.01% per year and a service life exceeding 30 years.
- Modular design allows flexible configuration and expansion according to different distribution requirements.
- Fully insulated and shielded extension busbars ensure high reliability and safety.
- Simple and effective interlocking system prevents maloperation.
- Reliable operating mechanism: mechanical endurance of the load break switch up to 5000 operations, and of the vacuum circuit breaker up to 10000 operations.
- Load break switch-fuse combination unit transfer current capability: 12 kV 1750 A; 24 kV 1400 A.
- Factory-integrated automation solutions available to support intelligent switchgear operation.
- Fully automated assembly line ensures consistent product quality.

Technical Parameters

LE-RMU-SF6-12 kV 630A	Unit	Load switch cabinet	Fuse combination electrical cabinet		
Rated voltage	kV	12	12	12	
Rated frequency	Hz	50	50	50	
Rated current	Α	630	125*	630/1250	
Rated power frequency withstand voltage (1min)	kV	42/48	42/48	42/48	
Rated lightning impulse withstand voltage (peak)	kV	75/85(95/110)	75/85	75/85	
Electrical Endurance	Times	E3	E3	E2	
Mechanical Endurance	Times	5000	5000	10000	
Rated short-circuit breaking current	kA		31.5*	20/25	
Rated Short-Circuit Making Current (peak)	kA	50/63	80*	50/63	
Rated transfer current	Α		1750		
Main and Earthing Circuit Short -Time Withstand Current	kA	50/63		50/63	
Earthing Circuit Short -Time Withstand Current (2 s)	kA	20		20	
Main Circuit Short -Time Withstand Current (4 s)	kA	20(25,4s)		20/25	
Internal Arc Classification	kA/s		AFLR, 20kA, 1s		
Rated Operating Pressure (at 20°C)	MPa	0.03	0.03	0.03	
Minimum Operating Pressure (at 20°C)	МРа	0.02	0.02	0.02	
Rated cable charging breaking current	А	40			
Rated Earth Fault Current	А	120			
Rated Earth Fault Cable Charging Current	Α	69.3			
Enclosure Protection Degree	IP	IP41	IP41	IP41	
Gas Tank Protection Degree	IP	IP67	IP67	IP67	
Annual Gas Leakage Rate	%/year	≤0.01%	≤0.01%	≤0.01%	
Panel Width	mm	360/375	360/420	360/420/425/50	
Panel Depth	mm	78	780/750 (excluding door)		
Panel Height	mm		1865/1950		

^{*} Limited by high-voltage fuse

Technical Parameters

LE-RMU-SF6-24 kV 630A	Unit	Load switch cabinet	Fuse combination electrical cabinet	
Rated voltage	kV	24	24	24
Rated frequency	Hz	50	50	50
Rated current	Α	630	125*	630
Rated power frequency withstand voltage (1min)	kV	65/79	65/79	65/79
Rated lightning impulse withstand voltage (peak)	kV	125/145	125/145	125/145
Electrical Endurance	Times	E3	E3	E2
Mechanical Endurance	Times	5000	5000	10000
Rated short-circuit breaking current	kA		31.5*	20/25
Rated Short-Circuit Making Current (peak)	kA	50/63	80*	50/63
Rated transfer current	А		1400	
Main and Earthing Circuit Short -Time Withstand Current	kA	50/63		50/63
Earthing Circuit Short -Time Withstand Current (2 s)	kA	20		20
Main Circuit Short -Time Withstand Current (4 s)	kA	20(25,3s)		20(25,3s)
Internal Arc Classification	kA/s	AFLR, 20kA, 1s		
Rated Operating Pressure (at 20°C)	MPa	0.03	0.03	0.03
Minimum Operating Pressure (at 20°C)	MPa	0.02	0.02	0.02
Rated cable charging breaking current	Α	31.5		
Rated Earth Fault Current	Α	75		
Rated Earth Fault Cable Charging Current	Α	54.6		
Enclosure Protection Degree	IP	IP4X	IP4X	IP4X
Gas Tank Protection Degree	IP	IP67	IP67	IP67
Annual Gas Leakage Rate	%/year	≤0.01%	≤0.01%	≤0.01%
Panel Width	mm	360	360	425/500

^{*} Limited by high-voltage fuse

^{*} Includes State Grid standardized customized dimensions

Technical Parameters

LE-RMU-SF6-40.5 kV 630A Outdoor	Unit	Load-break switch unit (C)	VCB unit (V)
Rated voltage	kV	40.5*	40.5*
Rated frequency	Hz	50/60	50/60
Rated current	A	630	630
Rated power frequency withstand voltage (1min)	kV	95/118	95/118
Rated lightning impulse withstand voltage (peak)	kV	185/215	185/215
Electrical Endurance	Times	E2	E2
Mechanical Endurance	Times	5000	10000
Rated short-circuit breaking current	kA		20/25/31.5
Rated Short-Circuit Making Current (peak)	kA	52/65*	52/65*/80
Rated transfer current	А	_	
Rated short-time withstand current of orimary circuit	kA	20/4s, 25/3s	20/4s, 25/4s, 31.5/4s
Rated short-time withstand current of earthing switch circuit	kA	20/25	20/25/31.5
Rated peak withstand current of primary and earthing circuit	kA	52/65*	52/65*80
AC class	kA/s	AFLR, 25kA, 1s	-
Rated operating pressure (at 20°C, gauge)	MPa	0.04	0.04
Minimum operating pressure (at 20°C, gauge)	MPa	0.03	0.03
Rated cable charging current	Α	21	-
Earthing fault current	Α	63	
Earthing fault cable charging current	Α	36	
Enclosure protection degree		IP54	IP54
Gas tank protection degree	-	IP67	IP67
Enclosure explosion-proof grade		IK10	IK10
Gas leakage rate per year	%/year	≤0.01%	≤0.01%
Switchgear width	mm	450	500

^{*}At 60Hz, it corresponds to 52/65kA, and at 50Hz, it corresponds to 50/63kA.

Technical Parameters

LE-RMU-SF6-40.5 kV 630A Indor	Unit	Load-Break switch (C)	Switch-fuse combination unit (F)	VCB unit (V)
Rated voltage	kV	40.5/60	40.5/60	40.5/60
Rated frequency	Hz	50/60	50/60	50/60
Rated current	Α	630	63**	630
Rated power frequency withstand voltage	kV	95/118	95/118	95/118
Rated lightning impulse withstand voltage (peak)	kV	185/215	185/215	185/215
Electrical Endurance	Times	E2	E2	E2
Mechanical endurance	Times	5000	5000	10000
Rated short-circuit breaking current	kA	31.5	_	20/25/31.5
Rated peak withstand current (peak)	kA	53/65*	80	53/65*/80
Rated transformer inrush current	Α	-	840	_
Main circuit short-time withstand current	kA	20/4s, 25/3s	-	20/4s, 25/4s, 31.5/4s
Rated peak withstand current of primary circuit and earthing circuit	kA	20/25	-	20/25/31.5
Short-time withstand current of primary circuit and earthing circuit	kA	53/65*	- AFLR, 25kA, 1s	53/65*/80
Internal arc class	kA/s	0.04	0.04	
Rated working pressure (20°C gauge)	МРа	0.03	0.03	0.04
Minimum working pressure (20°C gauge)	MPa	21		0.03
Rated cable charging current	Α	63		-
Earthling fault current	Α	36	-	_
Earthling fault cable charging current	Α	IP41	IP41	
Enclosure protection degree	-	IP67	IP67	IP41
Air-breathing enclosure protection degree	-	≤0.01%	≤0.01%	IP67
Gas leakage rate per year	%/year	450	450	<0.01%
Switchgear width	mm			500

^{*}At 60Hz, it corresponds to 52/65kA, and at 50Hz jt corresponds to 50/63kA.

^{*}Limited by the high-voltage fuse

SST SOLID-STATE TRANSFORMER R&D

Next-generation semiconductor-based power conversion

To reinforce our European premium quality DNA, the company has established an R&D center for European electrical and SST standards in China. The core technical team is led by senior engineers from China, Germany, and the Czech Republic, integrating the latest technological developments from both Europe and China. Our manufacturing base is certified to DIN EN ISO 9001, ensuring the synergy of German design and efficient Chinese production.



Ultra-High Efficiency

≥98.5% efficiency reduces energy losses and operational costs



Compact Size

60% smaller footprint compared to traditional transformers



Bidirectional Power

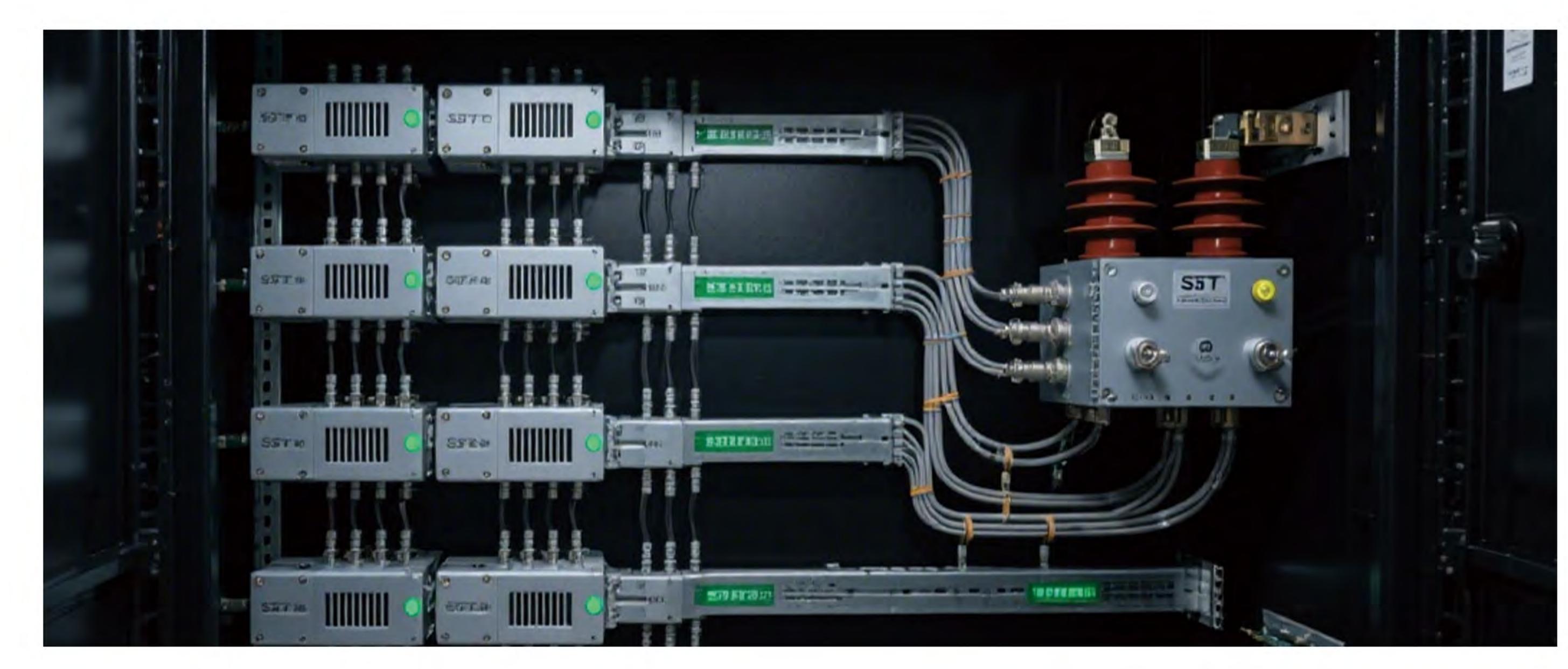
Seamless power flow control for grid stabilization and storage integration



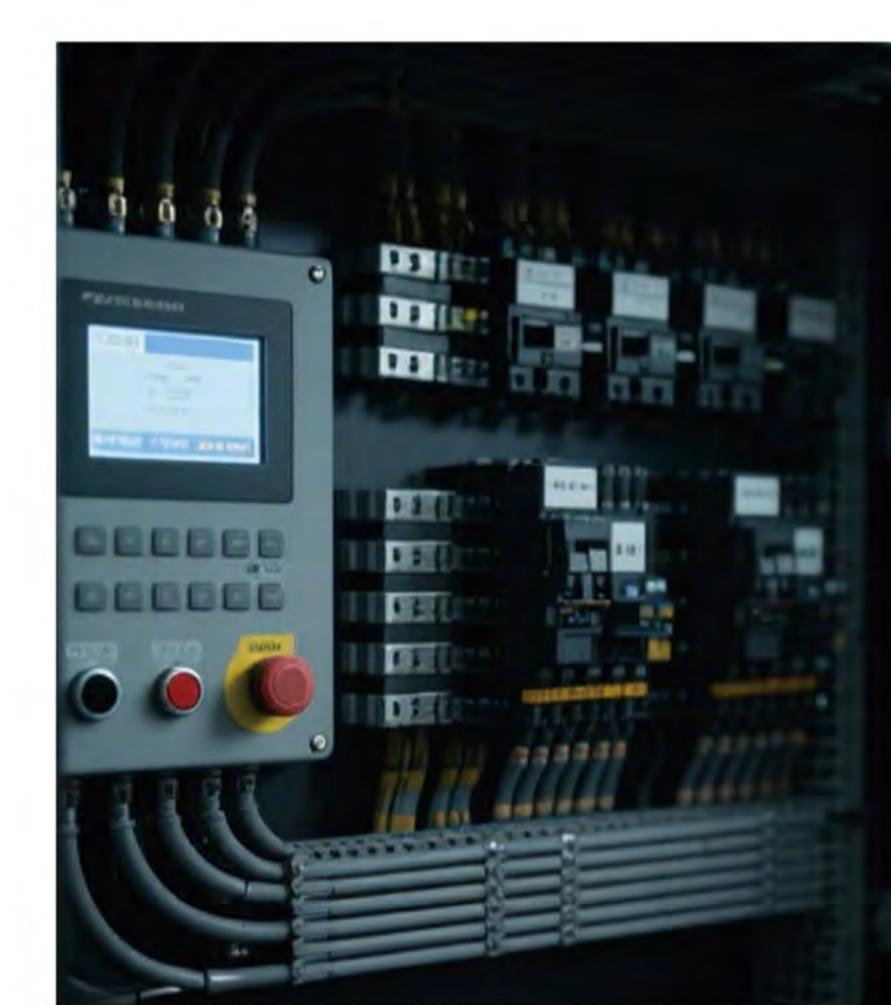
Fast Protection

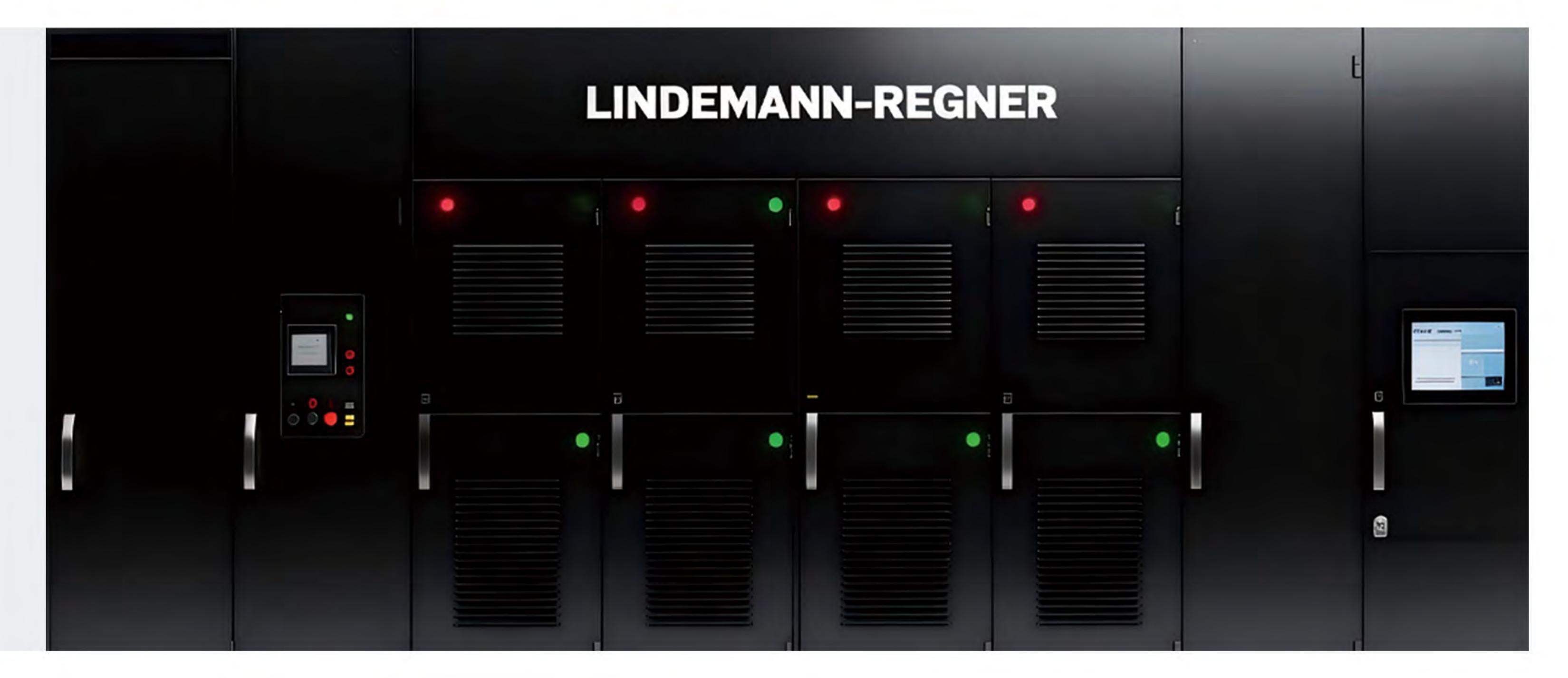
Millisecond-level protection with <10 ms fault isolation











EPC

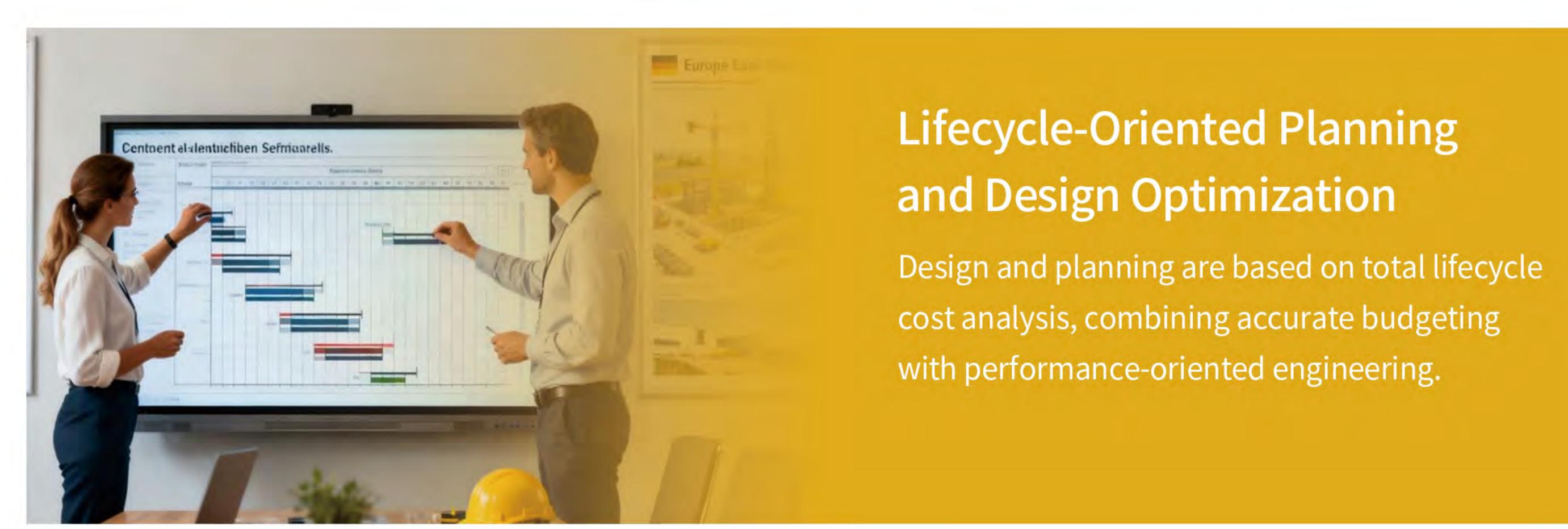
FULL LIFECYCLE PROJECT MANAGEMENT

The company operates as a German EPC provider (Engineering, Procurement, Construction) within the European and Middle Eastern energy sectors. Its activities focus on comprehensive lifecycle management of complex energy projects, covering all stages from conceptual design to long-term operation. The service portfolio spans the entire value chain of energy infrastructure projects, including offshore wind grid connections, energy storage systems, and large-scale distribution facilities. All projects are executed in accordance with German engineering and safety standards, ensuring efficiency, operational reliability, and sustainability through an integrated management approach.

Technical Consulting and Project Evaluation

Energy audits, feasibility studies, and market assessments form the basis for customized solutions in compliance with DIN,EN,and IEC standards.





Procurement and System Integration

Strict supply chain control and the use of European resources guarantee adherence to the highest quality and energy efficiency requirements.

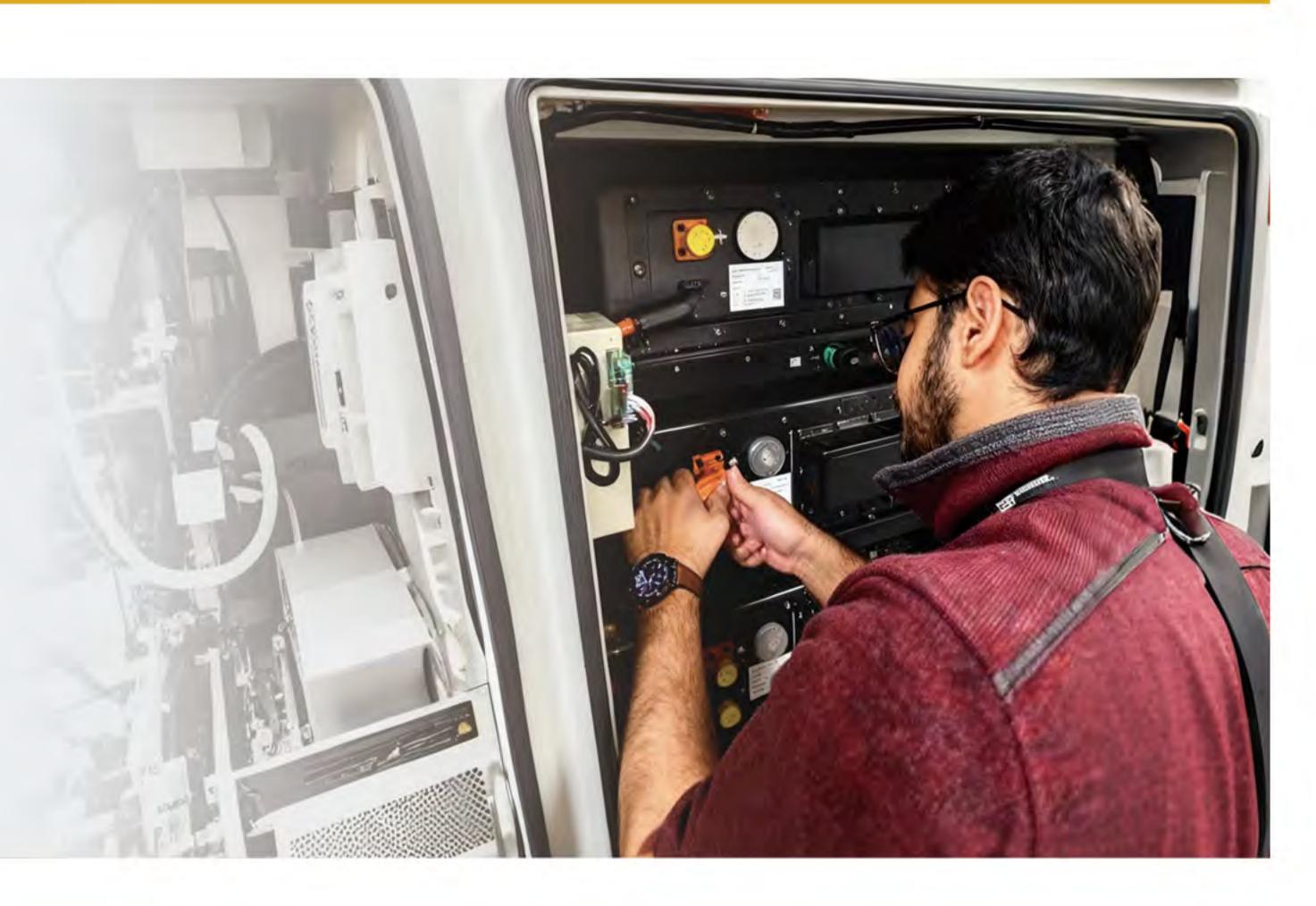


Digital and Modular Construction

Modular design principles and digital monitoring systems shorten construction time and reduce on-site risks.

Quality Assurance and Maintenance

After the project is put into operation, intelligent monitoring, preventive maintenance and rapid response services will be provided.



Project Refinancing & Operational Performance Support

For operational projects, the company provides financial and technical support, enabling clients to improve profitability, cash flow, and long-term asset performance.

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SERVICE

From conceptual planning to long-term operation, Lindemann-Regner provides comprehensive lifecycle support based on certified engineering, digital supervision, and on-site service expertise. The company's competence covers EPC implementation, transformer and switchgear manufacturing, as well as smart grid and system integration for utility and industrial power networks.



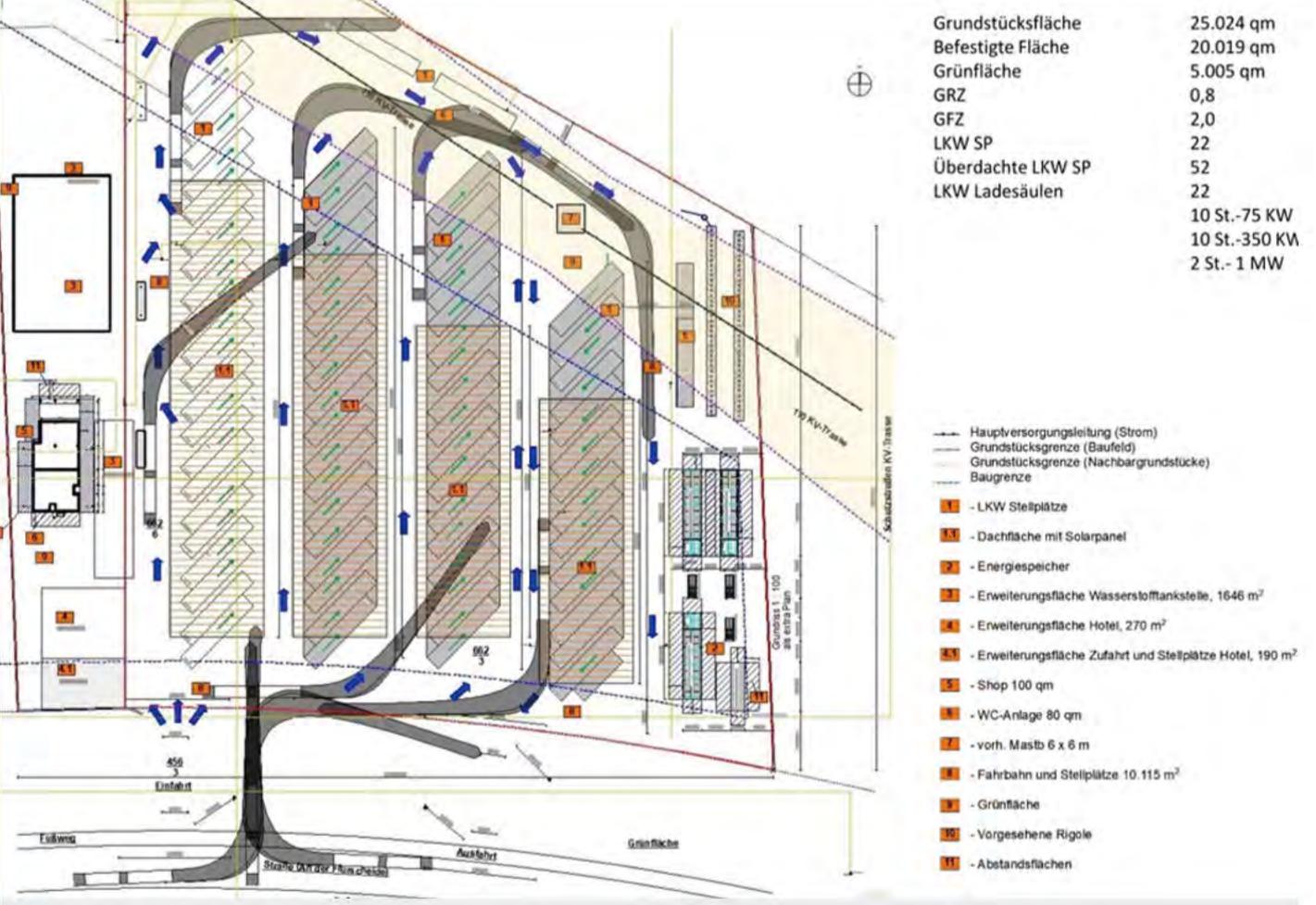
EPC Project & Installation

Turnkey implementation and safe commissioning of medium- and high-voltage transformers, SST systems, and switchgear in full compliance with IEC and EN standards. All projects follow structured execution procedures ensuring electrical, mechanical, and operational reliability throughout commissioning and service life.

Comprehensive Technical Maintenance

Preventive and corrective maintenance programs defined under Service Level Agreements (SLAs) secure maximum equipment uptime, operational safety, and extended lifecycle performance. Condition monitoring and predictive diagnostics enable proactive maintenance strategies and optimized cost efficiency.





HV/MV Transformer & System Design

Engineering design and simulation for distribution networks, grid interconnections, and microgrids, including load-flow studies, short-circuit analysis, and ROI modeling. System architectures are developed in accordance with European grid codes and regional operating conditions.

GLOBAL DELIVERY & SERVICE NETWORK

Leveraging a coordinated network of German R&D, Chinese intelligent manufacturing, and global logistics, Lindemann-Regner has established a rapid delivery and service network ensuring 72-hour service response and 30–90 day core equipment delivery.



After-Sales Service

A service network headquartered in Munich and covering France, the Czech Republic, Hungary, Poland, and Dubai, with more than 20 authorized service partners across Europe, enables 72-hour response times and 24/7 remote technical assistance.



Production Assurance

Regional production and logistics centers in Lübeck, Shanghai, and Dubai maintain strategic inventories of transformers, RMUs, and switchgear systems, guaranteeing continuous supply capability for major grid and EPC projects.



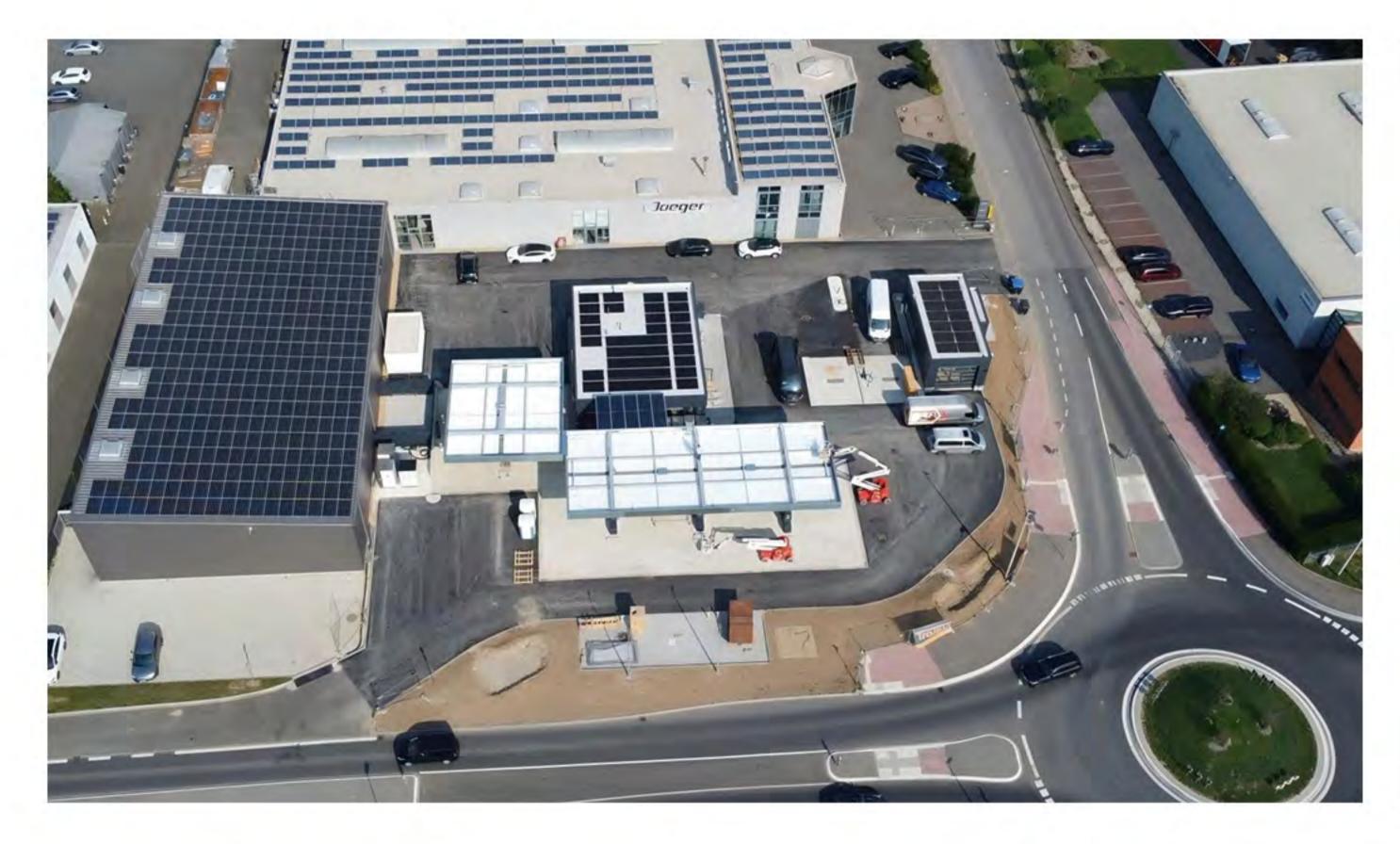
Warehousing Network

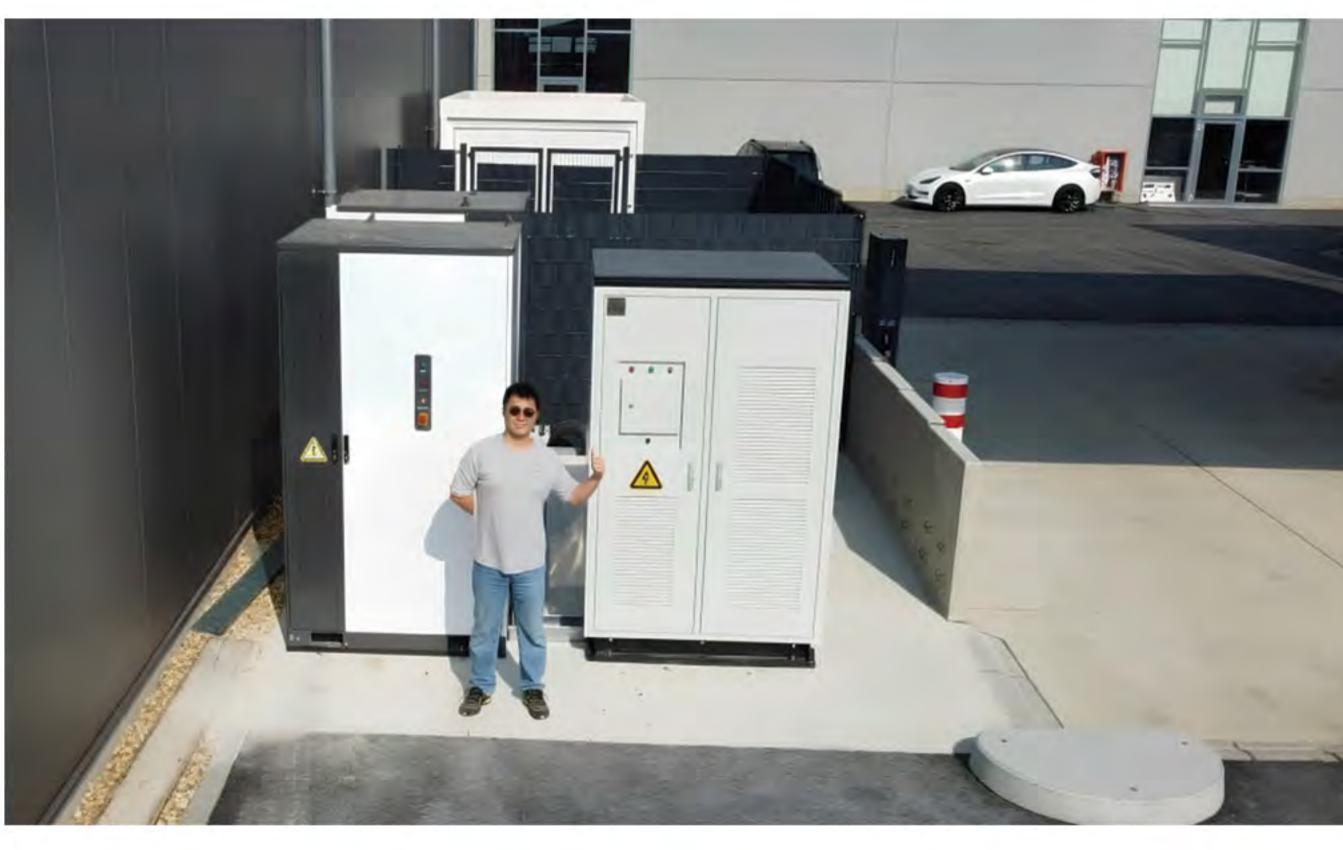
Dedicated long-term storage facilities at Lübeck, Shanghai, and Dubai ensure the immediate availability of key components for core regional markets.



Logistics Coordination

Through cooperation with DHL and international logistics providers, a multimodal transport concept—comprising sea, air, and land routes-enables 48-hour dispatch within Europe and 30- to 90-day global delivery. For critical infrastructure projects, the "Global Priority Dispatc" program ensures time-bound delivery and coordinated commissioning support.











180 kW Ultra-Fast Charging + Customized BESS + LINDEMANN High-Efficiency Power Conversion

Advanced German grid-boosting technology ensuring efficient and stable charging performance.









LINDEMANN Integrated Off-Grid / Microgrid Solution

Hybrid power supply with solar PV, diesel generation, BESS, and EMS.



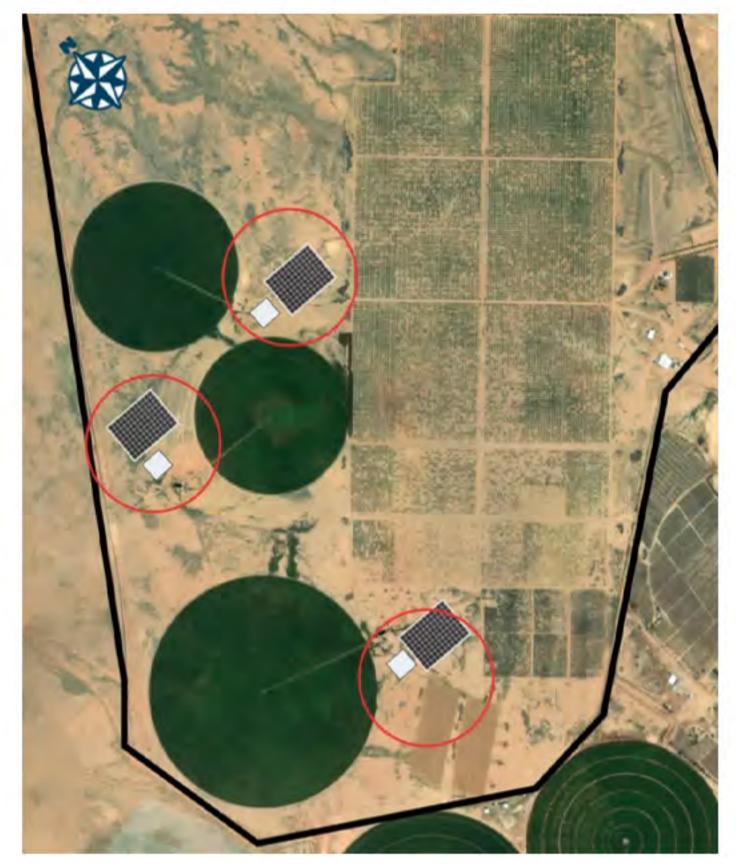






LINDEMANN Grid-Connected / Microgrid System

1000 W peak load management + 180 kW ultra-fast charging. Self-developed MP-ESS-200 modular cabinet integrated with 137 kWp PV array.







100 kW Stable Microgrid for Irrigation Supply

Reliable operation under extreme temperatures up to 55 °C, integrating PV, diesel generation, BESS, EMS, and active liquid cooling.







5 MVA High-Capacity Microgrid with Charging Infrastructure

Grid-connected hybrid solution combining PV generation and dynamic AC/DC load management.