

Deyle Catalog 2026

Home Energy Cube

C&I Energy Storage

Balcony PV Micro-Storage

2020 | 2021
INNOVATIVE THROUGH RESEARCH
Awarded by the Stifterverband
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DEYLE

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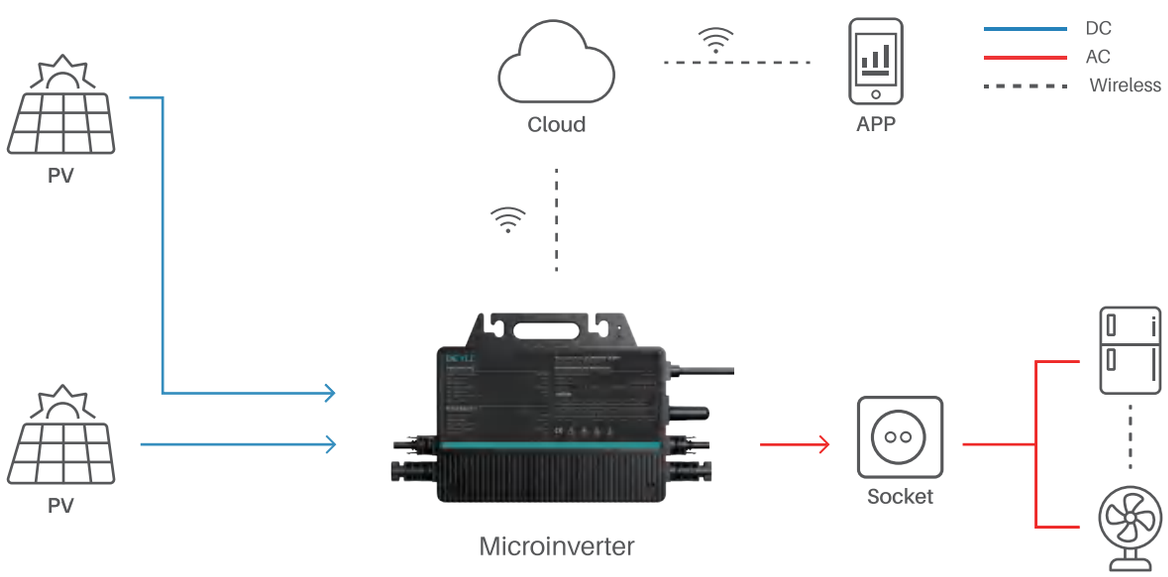


Part 3

Balcony Solar System

Application Scenarios

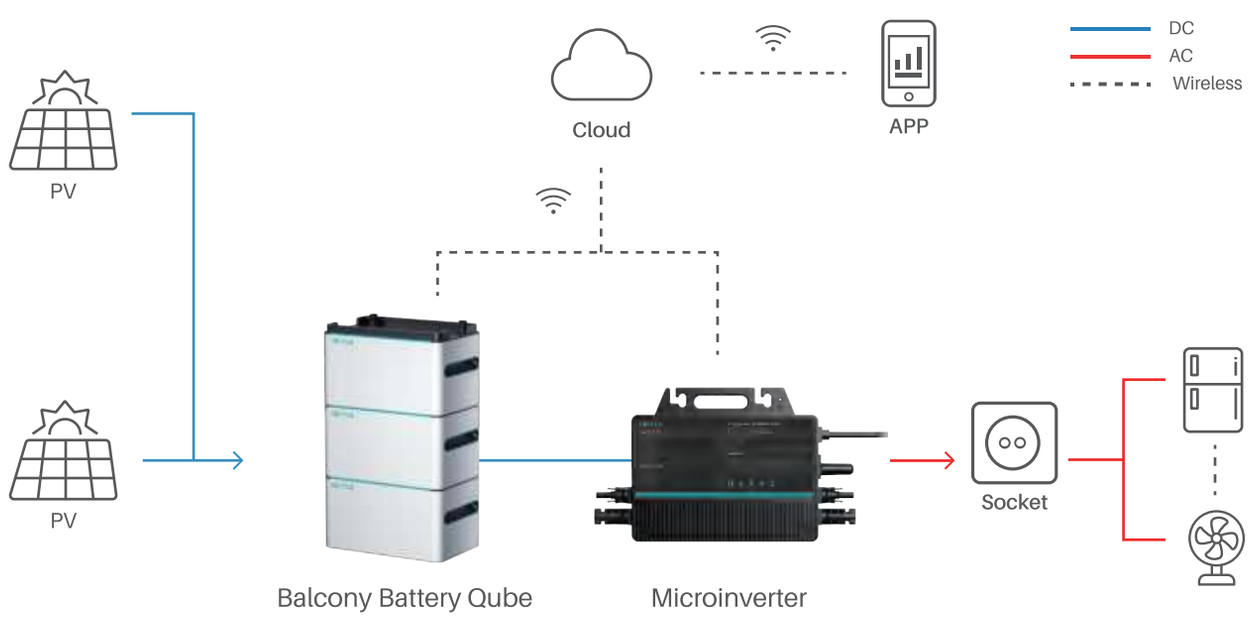




Our balcony photovoltaic system features two photovoltaic module strings paired with a high-efficiency on-grid microinverter, offering a simple and accessible way to generate solar power at home. Each PV string operates with an open-circuit voltage of up to 60 VDC and a maximum power of 590 Wp, ensuring safe and reliable performance. The microinverter delivers up to 800 W AC output and connects directly to a standard household socket, enabling effortless plug-and-play power for everyday appliances.

Application Scenarios





Beyond traditional balcony solar systems, our Split Storage System enhances energy independence with modular 1,024 Wh battery cubes that store surplus solar power generated by PV modules - maximizing your self-consumption and flexibility.

Application Scenarios





All-in-One

Our All-in-One Balcony Energy System integrates solar generation, energy storage, and AC power delivery into a single, compact unit. Supporting up to 1,600 Wp of PV input, it combines an 800 W AC on-grid inverter with a built-in 2,048 Wh battery pack, simplifying installation, reducing wiring complexity, and enhancing overall system safety.

Microinverter



DL/Mi800W-2B

Compact & Exquisite

EMC complies with European indoor use standards (IEC/EN61000-1/-3)

Output power can be upgraded to 1000W by software

Microinverters convert low-voltage DC power from each PV module directly into AC, eliminating high-voltage DC risks and significantly improving system safety. Each module operates with independent MPPT control to maximize energy harvest, while individual component monitoring enables precise performance tracking, simplified maintenance, and efficient asset management. The Deyle DL/Mi800W-2B microinverter delivers 800 W rated output and incorporates industry-leading power electronics technology. It complies with European safety and EMC standards, is certified for grid connection in multiple countries, and features dual-band 2.4G/5G Wi-Fi connectivity. Making it an ideal choice for modern balcony PV systems.

Specifications

Model	DL/Mi800W-2B
Input Data(PV)	
PV Inputs	2 × (320~590 Wp)
Max. Input Voltage	65 V
Start-up Voltage	18 V
MPPT Voltage Range	16~60 V
Max. Input Current	2×16 A
Max. Input Short Circuit Current	2×22 A
Number of MPPTs	2
Output Data(AC)	
Rated Output Power	800 VA
Nominal Output Voltage	230 V
Nominal Output Current	3.48 A
AC Frequency Range	45~55 Hz
Power Factor	0.99
Efficiency	
Max. Output Efficiency	96.70 %
MPPT Efficiency	99.80 %
Environmental and Mechanical	
Communication	Wi-Fi
Ambient Temperature Range	-40 ℃ ~ +65 ℃
Protective Class	I
Cooling	Natural convection
Enclosure Rating	Outdoor-IP67/Type3R
Nominal Dimensions (W × H × D)	220 mm × 180 mm × 30 mm
Nominal Weight	2.5 kg
Certification	
Compliance	IEC/EN62109-1/-2,EN 50549-1/-10, VDE-AR-N4105-2018 IEC/EN61000-6-1/2/3/4; IEC/EN61000-3-2/3

All-in-One



BEQ2000

- Inverter & battery in one block
- Minimal installation required
- 10 years lifespan
- IP65-rated Design
- Comprehensive certification
- PV inputs 1600Wp, AC outputs 800W, Battery Capacity 2048Wh

Our latest balcony energy storage system features an All-in-One design for fast, user-friendly installation. A dedicated smart app supports, time-of-use (TOU) electricity pricing, real-time power monitoring, and detailed energy statistics, enhanced by AI-generated insights and optimization reports for smarter energy management.

Specifications

Model	BEQ2000
Battery Data	
Capacity	2048 Wh
Rated Voltage	51.2 V(2P16S)
Cycle Life	>6000 cycles (25 °C, DOD 90 %, 0.5C/0.5C, SOH 80 %)
Battery Type	LFP
DOD	90 %
Input Data (PV)	
Commonly Used Module Power	2 × 800 W
Input Voltage	12~60 V
Max. Input Current (single)	20 A
Number of MPPTs	2
Output Data (AC)	
Rated Output Power	800 W
Output Voltage	220/230/240 V (Single-phase)
AC Frequency Range	47.5~51 Hz
Total Harmonic Distortion	Typ.<3 %,Max.<5 %
Power Factor (adjustable)	>0.99 default 0.9 leading···.0.9 lagging
Efficiency	
Max. Output Efficiency	96.5 %
MPPT Efficiency	99 %
Environmental and Mechanical	
Communication	Wi-Fi & Bluetooth
Charging Temperature Range	0 °C~50 °C
Discharging Temperature Range	-20 °C~+55 °C
Ingress Protection	IP 65
Cooling	Natural convection
Nominal Dimensions (W × H × D)	450 mm × 350 mm × 190 mm
Nominal Weight	27 kg
Certification	
Compliance	IEC62619, IEC62109-1, IEC61000-6-1/3, IEC61000-3-2/3, ETSI EN301489-1/17, ETSI EN300328; UN 38.3,RoHS2.0; EN50549-10, VDE4105, VDE 0124, OVE-directive R25:2020-3 TOR Erzeuger Type A, EN 50549-1/10,NEN EN50549-1+BW-BR0037940 Netcode, NF50549-10, EN 50549-1+C10/11:2021

Balcony Battery Qube



BBQ1000

- Stackable & flexible configuration
- MPPTs control
- Energy control strategy: Zero-Current feedback to grid, constant power or power control based on timing
- 10 years lifespan

The BBQ1000 is designed for balcony PV energy storage systems, allowing surplus PV solar energy to be stored and used when PV power is insufficient or as specified by the APP. Each cube has a capacity of 1024Wh, and is scalable up to 5120Wh.

Specifications

Model	BBQ1000
Battery Data	
Capacity (one pack)	1024 Wh
Rated Voltage	51.2 V (1P16S)
Maximum number of battery packs that can be connected in parallel	5
Cycle Life	>6000 cycles (25 °C, DOD 90 %, 0.5C/0.5C, SOH 70 %)
Battery Type	LFP
DOD	90 %
Input Data (PV)	
Commonly Used Module Power	2×600 W
Input Voltage	18~55 V
Max. Input Current	15 A × 2
Number of MPPTs	2
Efficiency	
Max. Output Efficiency	97 %
MPPT Efficiency	99 %
Environmental and Mechanical	
Communication	Wi-Fi & Bluetooth
Protection	Overcharge, over-discharge, overcurrent, high-temperature, low-temperature and short-circuit protection, PV high voltage rapid shutdown function.
Operating Temperature Range	-20 °C~+45 °C
Storage Temperature Range	-30 °C~+65 °C
Electric Heating Function	Provided
Ingress Protection	IP 65
Cooling	Natural convection
Nominal Dimensions (W × H × D)	330 mm × 210 mm × 195 mm
Nominal Weight	11 kg
Certification	
Compliance	IEC/EN 62109-2, EN 301489, EN 300328, EN 62368, IEC/EN 62619, IEC/EN 61000-3-2/3, UN 38.3

Balcony Battery Qube



BBQ750 Na

- Stackable & flexible configuration
- MPPTs control
- Energy control strategy: Zero-Current feedback to grid, constant power or power control based on timing
- 10 years lifespan

The BBQ750 with Sodium cells is designed for balcony PV energy storage systems, allowing surplus PV solar energy to be stored and used when PV power is insufficient or as specified by the APP. Each cube has a capacity of 750Wh, and is scalable up to 3750Wh.

Specifications

Model	BBQ750 Na
Battery Data	
Capacity (one pack)	750 Wh
Rated Voltage	48 V
Maximum number of battery packs that can be connected in parallel	5
Cycle Life	>3000 cycles (25 °C, DOD 90 %, 0.5C/0.5C, SOH 80 %)
Battery Type	Sodium
DOD	90 %
Input Data (PV)	
Commonly Used Module Power	2×600 W
Input Voltage Range	18~55 V
Max. Input Current	15 A × 2
Number of MPPTs	2
Environmental and Mechanical	
Communication	Wi-Fi & Bluetooth
Protection	Overcharge, over-discharge, overcurrent, high-temperature, low-temperature and short-circuit protection, PV high voltage rapid shutdown function.
Operating Temperature Range	-30 °C~+55 °C
Storage Temperature Range	-30 °C~+65 °C
Electric Heating Function	Provided
Ingress Protection	IP 65
Cooling	Natural convection
Nominal Dimensions (W × H × D)	330 mm × 210 mm × 195 mm
Nominal Weight	11 kg
Certification	
Compliance	IEC/EN 62109-2, EN 301489, EN 300328, EN 62368, IEC/EN 62619, IEC/EN 61000-3-2/3, UN 38.3

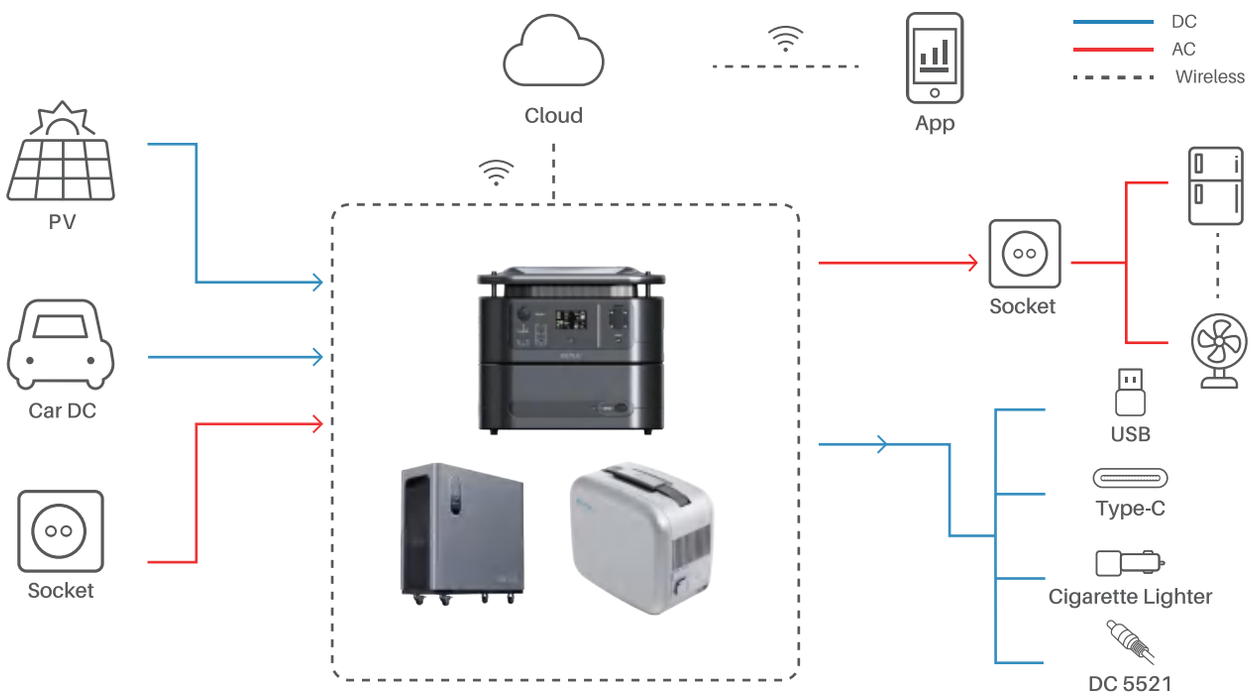


Part 4

Off-Grid Products

Application Scenario





Our off-grid energy product lineup combines high-performance inverters and batteries into a versatile power solution. Supporting both PV and AC mains charging, the system can reliably power household appliances and electric tools - ideal for home backup power as well as outdoor and mobile applications.

Hybrid Inverter - Off Grid



DL/HI-6000

- 2 times rated power peak output for 5 seconds
- Up to 120A charge and discharge current
- Support generator
- UPS transfer time <10ms
- Max. 6 units in parallel
- Colorful LCD display

Our off-grid inverter supports dual MPPT inputs with up to 9,000 W of PV input capacity. It delivers 6,000 W of rated off-grid output and up to 12,000 W peak power for 5 seconds, accommodating high-demand loads. Generator compatibility and a UPS switching time of less than 10 ms ensure seamless and reliable power continuity.

Specifications

Model	DL/HI-6000
PV Input	
Max. Input Power	4500W x 2
MPPT Voltage Range	120-500V
Rated PV Input Voltage	250V
Max. Input Current	20A x 2
No. of MPPT	1/2
MPPT Efficiency	⩾99.9%
AC Input/output	
Max. AC Input/output Power	6000W/6600W
Rated AC Input/output Current	27A/28.7A
Rated Input Voltage	230V
Input Voltage Range	170-280V/208-240V
Peak Output Power	12000W/5s
Rated Output Voltage	230V
Max. Output Current	11.6A
Rated Output Frequency	50/60Hz
THDV	< 3%
Max. Output Efficiency	⩾94%
Battery Input	
Battery Type	LFP
Rated Input Voltage	48V/51.2V
Input Voltage Range	40-60V/40-58.4V
Max. Charge Current	120A
Max. Discharge Current	120A
Environmental and Mechanical	
Operating Temperature	-30°C ~ 60°C
Communication	CAN/RS485
Weight	10kg
IP Rating	IP20
Dimensions	420 x 350 x 115mm
Cooling Method	Fan cooling
Certifications	IEC62109, EN61000-EMC

Backup Power



HEQ3600

Portable design

Multiple inputs and outputs options

Off-grid power output up to 3600W

Smart control by APP

Our HEQ3600 features a modular design composed of portable, stackable inverter cubes and battery cubes. With multiple charging options. Including up to 800 Wp of solar input and 1,850 W AC mains, and multiple DC and AC outputs, it delivers 3,600 W of off-grid AC power. Compact yet powerful, it is well suited for powering a wide range of electrical tools and equipment wherever energy is needed.

Specifications

Model	HEQ3600
Battery Data	
Material of Battery Cell	LFP
Capacity	2304Wh
Nominal Voltage	51.2V
Cycle Life	>3500 cycles (25℃,DOD 90%,0.5C/0.5C,SOH 70%)
Shipping SOC	50%~60%
Adapter Input	Port XT60-M Male, 58.4V (cccv), 17A, 1000W Max
Charging Temperature	0°C~45°C
Discharging Temperature	-10°C~45°C
Optimum Charging and Discharging Temperature	20°C~30°C
Storage Temperature	-10°C~45°C (⩾3 Months)
Self-discharge	⩽1mA, ⩽3.5%/Month (Left the battery pack idle for three months and charge it to 50% SOC and store at 25±2°C)
Input Data	
AC Input Voltage	230V
AC Input Frequency	50Hz
AC Input Power	1850W Max
Solar Panel Input	800W Max, 10～60V DC
Car DC Input	240W Max, 12V/24V
Output Data	
AC Output Voltage	230V
AC Output Frequence	50Hz
AC Output Power (Total)	3600W Max (AC Port X 3, 16A Max)
AC Output Peak Power	7200W Max 200ms
Car (Cigarette Lighter) Output and DC5521 Output Power	DC 12V, Car Output / DC5521 total 120W DC 24V, Car Output / DC5521 total 240W
Type-C Output	100 W × 2
USB Output	18 W × 3
Environmental and Mechanical	
Nominal Dimensions (W × H × D) - Host	520mm × 280mm × 235mm
Nominal Weight - Host	12.45kg
Nominal Dimensions (W × H × D) - Battery	520mm × 235mm × 235mm
Nominal Weight - Battery	22.15kg
Wireless Connection	Supports WiFi 802.11 b/g/n,BT V5
Charging Temperature	0°C~45°C
Discharging Temperature	-10°C~45°C
Optimum Charging and Discharging Temperature Range	20°C~30°C
Storage Temperature	-10°C~45°C
Cooling	Air cooling
Certification	
Compliance	EN55032, EN55035, EN303 0417, EN 301 489-1, IEC 62368, REACH, RoHS, UN 38.3

Backup Power



HEQ3000

Use EV-Grade LFP battery Cell

Fastest Charging, 3000W AC input, 1500W solar input

Control comes easy with voice commands

Power up to 17 devices at once

Our HEQ 3000 is a high-performance home energy storage solution powered by an EV-grade LFP battery, delivering exceptional safety, stability, and long-term reliability. Designed to support modern lifestyles, it can power up to 17 devices simultaneously, covering everyday essentials and high-demand appliances with ease. Featuring advanced fast-charging technology, the HEQ 3000 can reach a full charge in just 1.2 hours, minimizing downtime and maximizing availability. Smart and connected, it can be seamlessly controlled via a dedicated app and integrates with Amazon Alexa and Google Home for convenient voice control.

Specifications

Model	HEQ3000
Battery Data	
Battery Type	LFP
Capacity	3072 Wh
Rated Voltage	51.2 V
Cycle Life	2500 Cycles to 80+% Capacity, 6500 Cycles Max
Input	
AC Charge	Max 1800 W, 120 V, 15 A (US)
	Max 3000 W, 230 V, 15 A (EU)
	Max 1500 W, 100 V, 15 A (JP)
	Max 3000 W, 230 V, 15 A (UK)
Solar Charge	Max 1500 W, 12~75 V
Wind Turbine Charge	Max 200 W, 12~75 V
AC +Solar/Wind Charge	Max 3000 W
Output	
AC Output (x5) EU&UK Version AC Output x4	3000 W Total, 6000 W Surge
USB-C Port (x2, PD3.1)	Max 140 W, 5 V=3 A/9 V=3 A/12 V=3 A/15 V=3 A/20 V=5 A/28 V=5 A
USB-A Port (x4, QC3.0)	Max 18 W, 5 V=3 A/9 V=2 A/12 V=1.5 A
RV Port (x1)	Max 360 W, 12 V
Cigarette Lighter Port (x1)	Max 120 W, 12 V
DC5521 Port (x2)	Max 36 W, 12 V
Wireless Output (x2)	Max 15 W
UPS Function	⩽12 ms
Environmental and Mechanical	
Communication	Bluetooth, Wi-Fi
Voice Commands	Support (Amazon Alexa, Google Home Connectivity)
Protection	Over Voltage Protection, Overload Protection, Over Temperature Protection, Short Circuit Protection, Over Current Protection, Low Voltage Protection, Low Temperature Protection
Ambient Temperature for Discharging	0~45 °C
Ambient Temperature for Charging	0~45 °C
Optimal Operating Temperature	20~30 °C
Ambient Temperature for Storage	0~45 °C
Nominal Dimensions (L*W*H)	560 mm*230 mm*543 mm
Nominal Weight	38 kg
Certification	
Compliance	CE, RoHS, WEEE, FCC, UL, UN38.3, METI, PSE

Portable Power Qube



PPQ1000

Portable energy storage power supply with detachable, combinable and replaceable battery packs.

Specifications

Model	PPQ1000
Inverter(P1000)	
Nominal Dimensions (L x W x H)	330 mm x 210 mm x 60 mm
Nominal Weight	2.5 kg
Max. PV Input Power	600 W
AC Input	100~240 V, 120 W
AC Output	220 ~240 V, 1000 W
DC Output	USB 5 V2 A, 10 W
Protection	Input undervoltage, output short circuit, output overload, high temperature, and low temperature protection
Communication	CAN
Certification	IEC/EN 61000, EN 62109
Battery (BBQ1000)	
Battery Type	LFP
Capacity	1024 Wh
Max Number of Parallelizable Battery Packs	5
Nominal Dimensions (W x H x D)	330 mm x 210 mm x 195 mm
Nominal Weight	11 kg
For more details, see BBQ1000 specification	
Battery (BBQ750)	
Battery Type	Sodium
Capacity	750 Wh
Max Number of Parallelizable Battery Packs	5
Nominal Dimensions (W x H x D)	330 mm x 210 mm x 195 mm
Nominal Weight	11 kg
For more details, see BBQ750 Na+ specification	

Portable Power Qube



PPQ300

- **Portable and Multifunctional**

  Integrates bidirectional conversion and PV input, making it suitable for diverse energy storage needs.

- **Various Output Options**

  Supports AC, USB, and Type-C outputs, allowing users to charge a wide range of devices simultaneously.

Specifications

Model	PPQ300
Battery Data	
Cell Material	LFP
Cycle Life	>6000 cycles (25 °C, DOD 90 %, 0,5C/0,5C, SOH 70 %)
Capacity	1004.8 Wh
Battery Level Display	4-segment LED (green LED display battery level and red LED displays alarm prompt)
Shipping SOC	50 %~60 %
Input Data	
AC Input Power	350 W Max
AC Input Voltage	150~270 V, 45~65 Hz
PV Input	12~60 V/10 A Max/220 W Max
Output Data	
Total AC Output Power	300 W Max
AC Output Voltage	230 V 45~65 Hz
UPS Function	20 ms
DC Output	TYPE-C 5 V/9 V/12 V, 4 A Max 20 W
	USB-A 5 V2 A, 5 V1 A Max 15 W
Environmental and Mechanical	
Nominal Dimensions (W × H × D)	290 mm × 248 mm × 168 mm
Nominal Weight	≈9.2 kg
Cooling	Air cooling
Charging Temperature	0 °C~45 °C
Discharging Temperature	-10 °C~45 °C
Optimum Charging and Discharging Temperature	20 °C~30 °C
Storage Temperature	-20 °C~45 °C
Sleep Current	Less than 1mA (ARM sleep, DSP power down)
Certification	
Compliance	IEC/EN62109, IEC/EN62619, VDE-AR-N 4105-2018 IEC/EN 61000-3-2/-3 EN300328, UN 38.3



Deliver **E**nergy for **Y**our **LifE**!



Part 5

Company Profile

Company Profile

In 1954, Deyle GmbH was founded in Stuttgart, Germany, providing busbar and power distribution systems for industrial clients. The first installed busbar systems are still in service to this day.

In 2005, Deyle expanded into medium- and low-voltage distribution products and intelligent power distribution systems.

In 2018, Deyle established a joint venture in Nanjing, China, focusing on the R&D and manufacturing of medium- and low-voltage circuit breakers and intelligent distribution products.

In 2019, Deyle Technik GmbH was founded, marking the company's entry into the renewable energy sector. Leveraging the engineering innovation and manufacturing strengths of its Chinese subsidiary, Deyle Technik delivers high-quality residential and commercial PV/storage solutions to global customers, adhering to German standards and quality.

Deyle Group has offices in Stuttgart and Frankfurt, Germany, as well as in Nanjing, Changzhou, and Shenzhen, China, with approximately 200 employees. Its manufacturing and OEM factories are located in Stuttgart, Germany, and in Nanjing, Changzhou, and Changsha, China.









Introduction to Power Distribution Products

DEYLE not only engages in the production and operation of energy storage equipment, but also provides power distribution products that have been selected and recognized by customers in many countries, as shown in the figure below.



1954

Deyle GmbH was founded in Stuttgart

2005

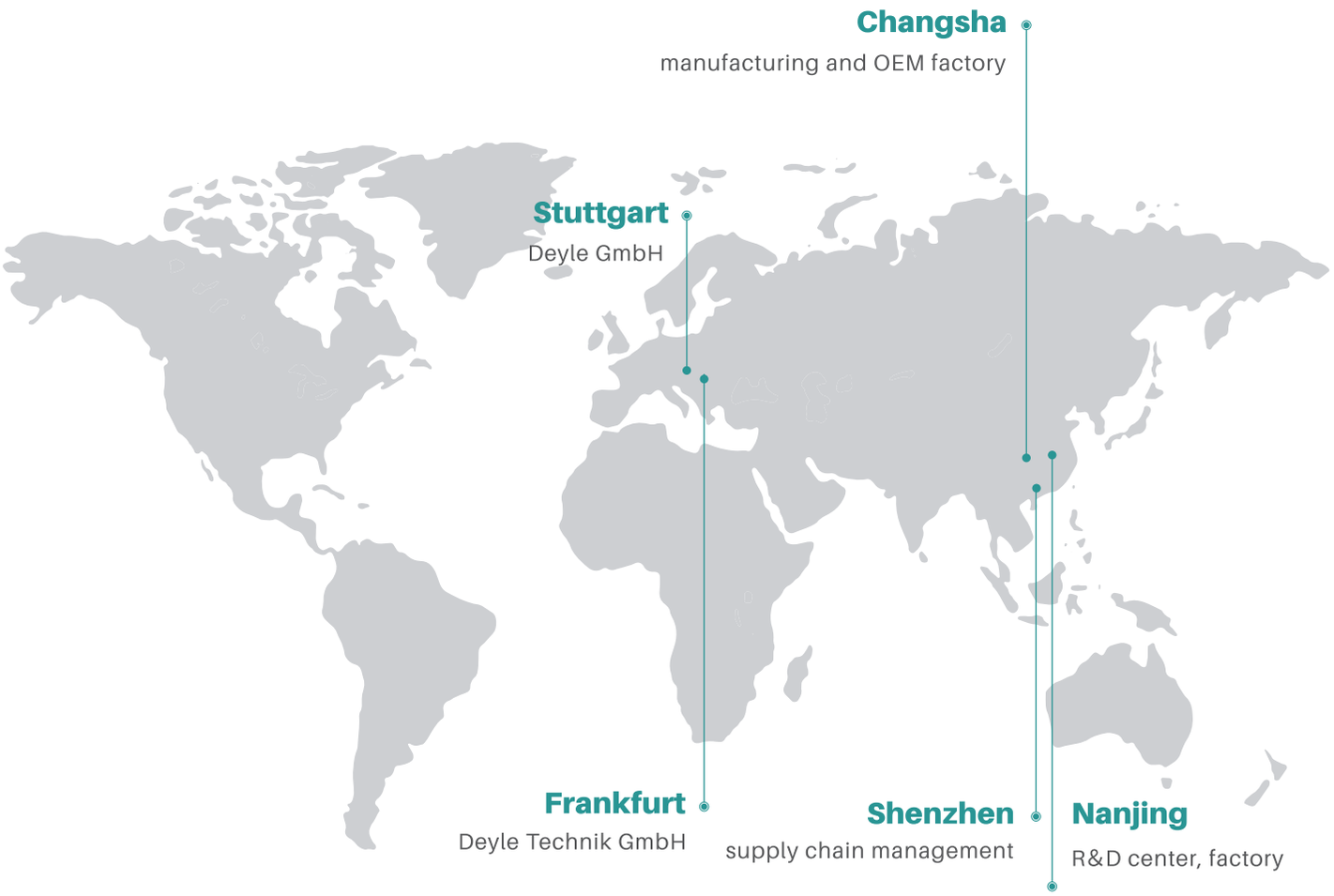
Business expansion of Deyle Group

2018

Deyle established a joint venture in Nanjing,China

2019

Deyle Technik GmbH was founded



DEYLE

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