

LEDVANCE.COM



LEDVANCE

RE **NEW** ABLES

#RENEWABLES
#NETZERO
#SMARTENERGY

ADVANCING SOLAR ENERGY

LEDVANCE RENEWABLES

December 2023



ADVANCING SOLAR ENERGY LEDVANCE RENEWABLES

LEDVANCE stands for advancing light. Now it also stands for ADVANCING SOLAR ENERGY.

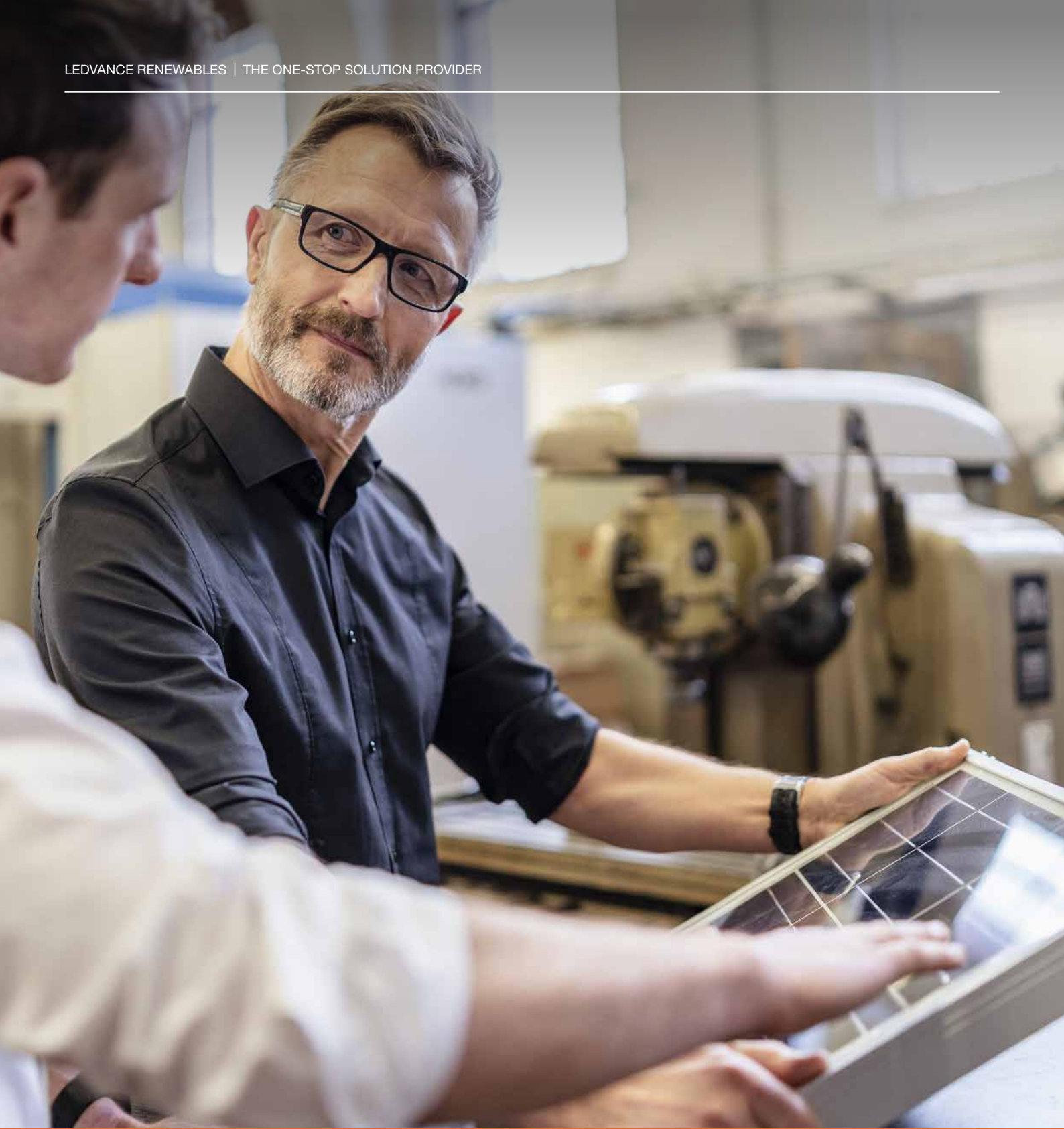
Why is that? We are lighting enthusiasts. Sunlight is our inspiration. We bring light into people's lives and are driven by the goal of increasing our impact on Net Zero. By harnessing the power of the sun, we enable private and business customers to generate their own clean energy, reduce their dependence on traditional energy sources and minimize their impact on the environment – we fuel people's lives with smart energy. LEDVANCE offers a unique vertically integrated solution for the building sector covering energy supply, energy storage, energy use and integration with power systems.

LEDVANCE Renewables not only drives positive change, but also contributes to a brighter, greener future for our planet.



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YOUR RELIABLE PARTNER
**THE ONE-STOP SOLUTION
PROVIDER**

THE WHOLE PHOTOVOLTAIC-SYSTEM FROM A SINGLE SOURCE

LEDVANCE Renewables is the one-stop-shop for photovoltaic systems, offering a comprehensive range of products and services. Our solutions seamlessly integrate photovoltaic panels, inverters and batteries, all specifically designed for both residential and commercial applications. To enhance user experience and convenience, we have developed the LEDVANCE Renewable App, which allows you to monitor your photovoltaic system effortlessly, anytime, anywhere. Stay connected to your energy production and ensure optimal performance and efficiency with this smart tool.

With a strong commitment to reliability and excellence, LEDVANCE also offers technical support to help you with any questions you may have regarding our high quality photovoltaic solutions. This way, our comprehensive and integrated approach covers all aspects, from consulting, and supply of the complete photovoltaic systems, to performance and energy monitoring as well as technical support.



Save time and effort with our Renewables one-stop-shop offers, and benefit from reliable service and clear support.



INVESTING IN YOUR FUTURE RENEWABLE GREEN ENERGY FOR YOUR HOME

WHY PHOTOVOLTAIC FOR RESIDENTIAL BUILDINGS?

<p>ACT SUSTAINABLY AND AVOID CO2: Generating energy 100% carbon neutral.</p>	<p>MAKE A SAFE INVESTMENT: Save on electricity costs and enjoy grid independence.</p>	<p>BENEFIT FROM THE ONE-STOP-SHOP PRINCIPLE: We ensure consistently high quality standards.</p>	<p>HIGH EFFICIENT PANELS: Thanks to solar panels that use new cell technology to reach up to max. efficiency of 22.0%.</p>	<p>TAKE ADVANTAGE OF SIMPLICITY: With our integrated clear app, you can eliminate the need for third-party communication hardware.</p>
<p>RELY ON A FUTURE-PROOF SYSTEM: With our expandable system, we can meet your energy needs today and for years to come.</p>	<p>USE A MODULAR AND CONSISTENT DESIGN: Intuitive and user-friendly monitoring via integrated measuring and control devices.</p>	<p>WORK WITH A TRANSPARENT PARTNER: We find the best system for your individual needs.</p>	<p>TRUST A GLOBAL BRAND: LEDVANCE, a reliable partner with a strong lighting legacy and a global pre- and post-sales network.</p>	<p>PROFIT FROM OUR LONG-TERM GUARANTEE*:</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>12 Years Product guarantee P-Type</p> </div> <div style="text-align: center;"> <p>15 Years Product guarantee N-Type</p> </div> </div>



IEC 61215: Design suitability and type approval
 IEC 61730: Safety qualification
 IEC 61701: Salt mist corrosion testing
 IEC 62716: Ammonia corrosion testing
 IEC 60068: Environmental testing: Dust and sand

* Provides you peace of mind as the purchase is made under European law.



USE SPACE RESPONSIBLY AND HELP YOUR BUSINESS REAP THE REWARDS

WHY PHOTOVOLTAIC FOR COMMERCIAL BUILDINGS?

MAKE EFFICIENT USE OF AVAILABLE SPACE:

By using it to generate electricity.

GAIN PLANNING SECURITY:

Save on electricity cost and enjoy grid independence.

CHOOSE FROM A WIDE RANGE OF PRODUCTS:

From high performance inverters with up to 110KW capacity and bigger panel sizes for commercial applications.

REDUCE YOUR COMPANY'S CARBON FOOTPRINT:

And benefit from being an eco-player.

PROFIT FROM OUR LONG-TERM GUARANTEE*:

12 Years

Product guarantee P-Type

15 Years

Product guarantee N-Type and bifacial panels

WORK WITH A TRANSPARENT PARTNER:

We find the best system for your individual needs.

TRUST A GLOBAL BRAND:

LEDVANCE, a reliable partner with a strong lighting legacy and a global pre- and post-sales network.






















IEC 61215: Design suitability and type approval
IEC 61730: Safety qualification
IEC 61701: Salt mist corrosion testing
IEC 62716: Ammonia corrosion testing
IEC 60068: Environmental testing: Dust and sand

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LEDVANCE RENEWABLES – SYMBOLS AND ABBREVIATIONS

LIST OF ABBREVIATIONS

W_p	Nominal power Watt Pmax
η (%)	Efficiency
Input (kW)	Max. DC Input Power
Output (kW)	Rated Output Power
X* MPPT	No. of MPP Trackers
U MPPT (V)	MPP Voltage Range
I_{MPPT} (A)	Max Input Current per MPPT
dB (A)	Noise Emission
I_{MAX} (A)	Max AC Output Current
V	Nominal Voltage
kWh	Nominal Capacity

	Maximum system voltage		Battery voltage range
	Operating temperature		Type of protection
	PV connector (Stäubli MC4)		Charging curve
	Front/rear side load		Depth of discharge
	Max. DC input voltage		Cycle life
	Nominal output voltage / range		Scalability low voltage battery
	WIFI		Scalability high voltage battery
	Ethernet		Cooling type
	Surge protection		Guarantee
	Battery type		TÜV Süd certification

LEDVANCE RENEWABLES – SYSTEM OVERVIEW

	RESIDENTIAL	COMMERCIAL
PANELS	<ul style="list-style-type: none"> - <2m² area - In silver or black frame and full black colors - P- and N-Type technologies 	<ul style="list-style-type: none"> - >2m² area - Mono- and bifacial - P- and N-Type technologies - up to 660W_p
INVERTERS	<ul style="list-style-type: none"> - Hybrid- or string, 1/3 phase - Intelligent monitoring 	<ul style="list-style-type: none"> - High efficiency - Multi MPPT of up to 8 - Up to 110kW power
BATTERIES	<ul style="list-style-type: none"> - Low voltage and high voltage stack system - Easy to extend - Capacity up to 24.5kWh, 6000 charging cycles 	

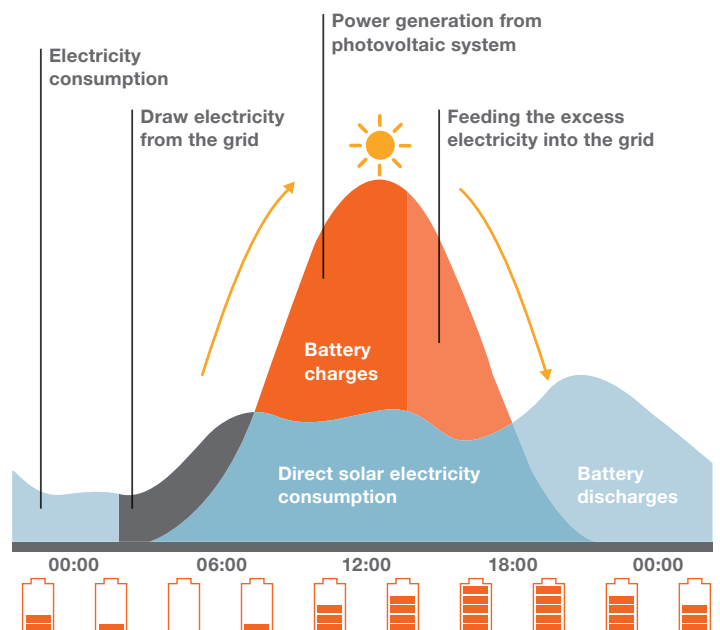
INTERACTION OF SYSTEM COMPONENTS



LEDVANCE RENEWABLES – OPERATION OF THE SYSTEM

With LEDVANCE RENEWABLES, you can become almost completely independent of conventional energy sources.

Our system solution has a battery that stores power generated by the photovoltaic system, covering a large portion of your electricity needs – even when the sun is not shining.



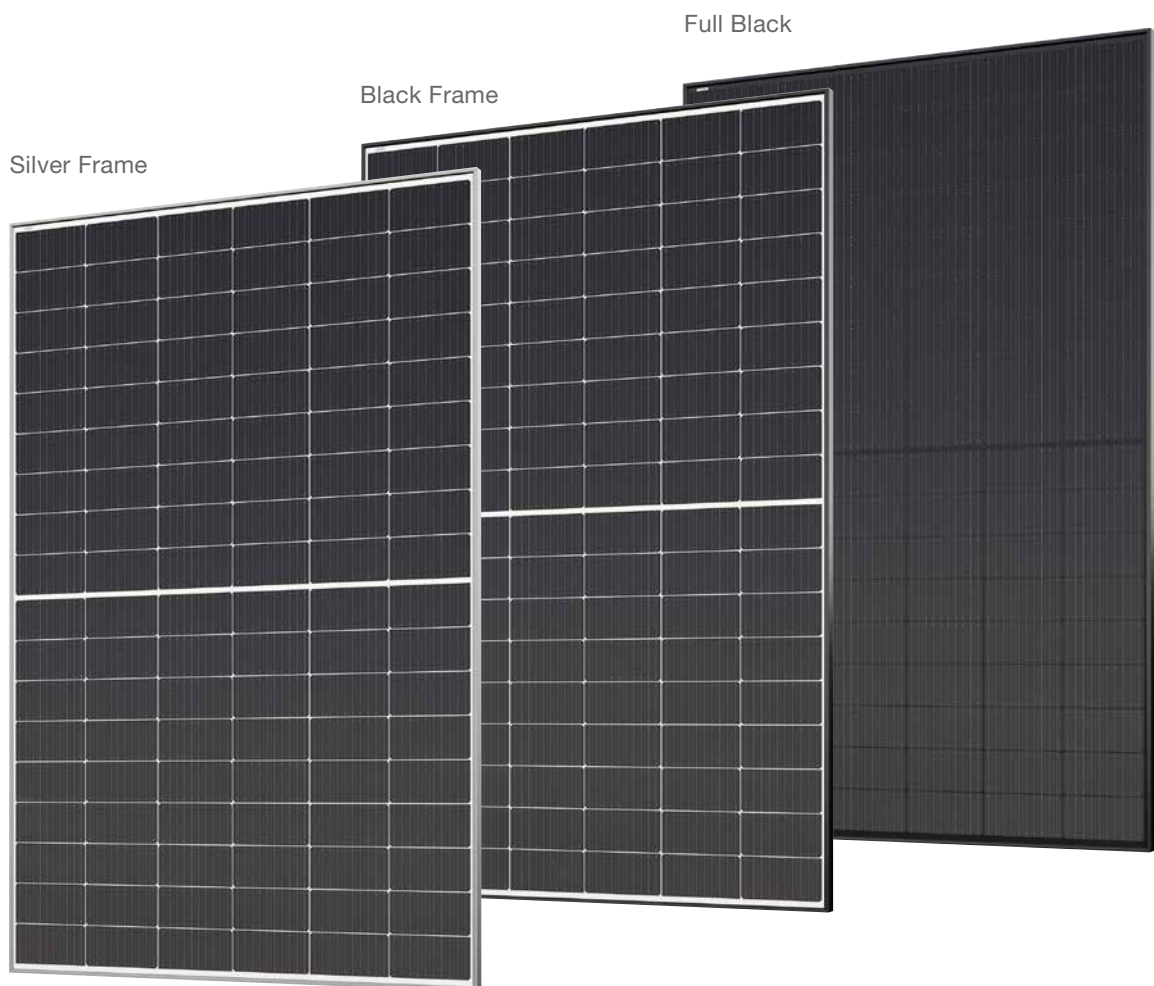


PHOTOVOLTAIC PANELS LIVING THE WAY OF ACTING MORE SUSTAINABLE

EFFICIENCY ALL THE WAY TRANSFORMS EVERY RAY OF SUNLIGHT

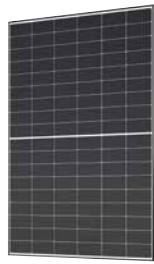
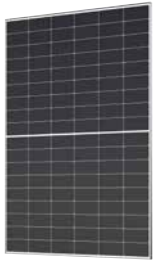
Our solar panels are available in a variety of configurations. Among other things, you can choose from solar panels with power ratings ranging from 405W to 660W and three different colours. Depending on whether the panels are to be installed on the roof or in areas with a highly reflective surface, you can choose between panels that can produce electricity from the top only (monofacial) or from both the top and bottom (bi-facial).

It is also possible to purchase panels with up to 16 busbars – that reduces resistance and makes the panels more efficient. To name just a few of your configuration options, LEDVANCE Renewables has a wide range of colours, sizes, capacities and functionalities to suit your needs.



RESIDENTIAL PANELS

Smaller module sizes in various colours and cell technologies



PRODUCT FEATURES

- Panel size below 2 m²
- Durable anodized aluminium frame
- 3.2 mm tempered glass
- IP68 junction box
- Wide operating temperature: -40 - +85° C
- Maximum static load up 5400 Pa
- MC4 EVO2 connectors
- Multi Bus Bar technology
- Also available in shorter cable length 0.3 m

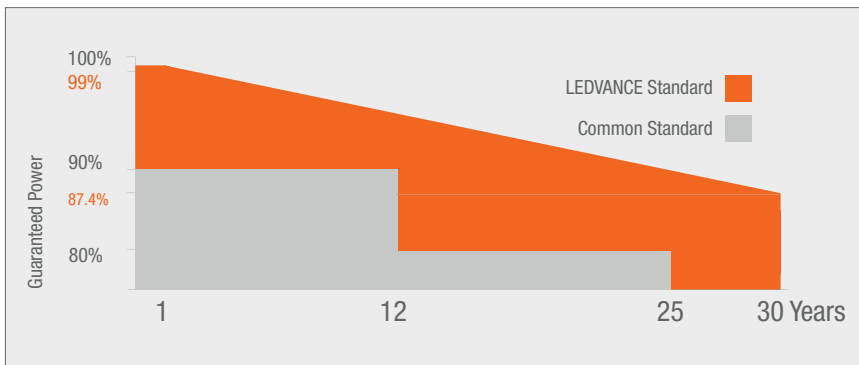
PRODUCT BENEFITS

- Durable design and highest quality component selection for long lasting performance
- Better weak illumination response
- Low light induced degradation for N-TOPCon Types
- Resistance to potential induced degradation
- Resistant to difficult weather conditions
- 12 years product guarantee for P-Type panels
- 15 years product guarantee for N-Type panels
- 25 years linear power guarantee for P-Type panels
- 30 years linear power guarantee for N-Type panels

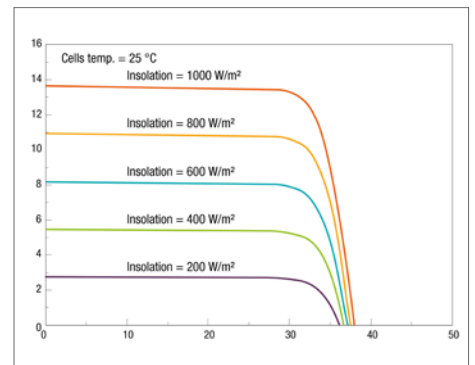
AREAS OF APPLICATION

- Residential Buildings
- Suitable for various applications (rooftop, ground mounting systems)

FURTHER PRODUCT DETAILS

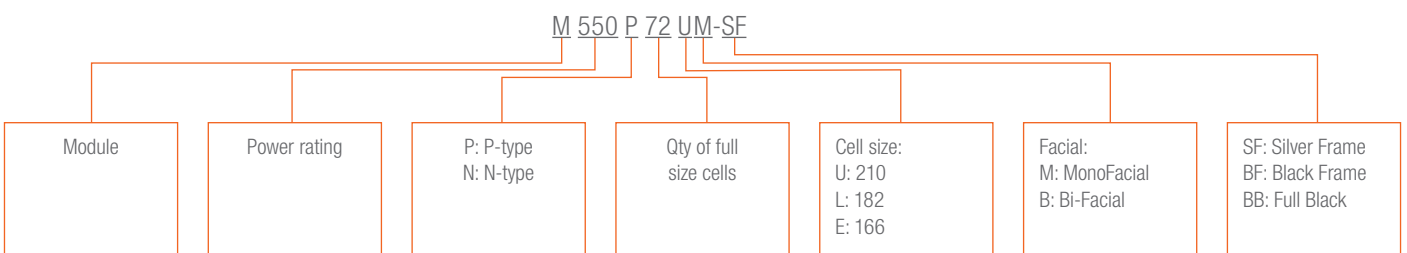


Degradation for N-TOPCon Types



Current-voltage curve of module M430N54LM-BF-F3

ORDER REFERENCE (HOW TO READ THE PRODUCT NAME):



PERFORMANCE PANELS

High-tech monofacial panels for maximum performance

PERFORMANCE
CLASS



Product name	EAN	Color	Wp	η (%)	Number of Half-Cut Cells	Solar Cells	L × W × H [mm]	Piece/Box	Piece/Container (40'HC)
M415N54LM-BB-F3	4099854199998	Full Black	415	21.25	108	N-Type Topcon	1722x1134x30	36	936
M420N54LM-SF-F3	4099854137259	Silver Frame	420	21.50	108	N-Type Topcon	1722x1134x30	36	936
M420N54LM-BF-F3	4099854137402	Black Frame	420	21.50	108	N-Type Topcon	1722x1134x30	36	936
M420N54LM-BB-F3	4099854189388	Full Black	420	21.50	108	N-Type Topcon	1722x1134x30	36	936
M425N54LM-SF-F3	4099854199943	Silver Frame	425	21.76	108	N-Type Topcon	1722x1134x30	36	936
M425N54LM-BF-F3	4099854199981	Black Frame	425	21.76	108	N-Type Topcon	1722x1134x30	36	936
M430N54LM-SF-F3	4099854199936	Silver Frame	430	22.02	108	N-Type Topcon	1722x1134x30	36	936
M430N54LM-BF-F3	4099854199974	Black Frame	430	22.02	108	N-Type Topcon	1722x1134x30	36	936

VALUE PANELS

Monofacial panels with proven state of the art technology

VALUE
CLASS



Product name	EAN	Color	Wp	η (%)	Number of Half-Cut Cells	Solar Cells	L × W × H [mm]	Piece/Box	Piece/Container (40'HC)
M405P54LM-BB-F3	4099854137358	Full Black	405	20.74	108	Mono PERC	1722x1134x30	36	936
M410P54LM-SF-F3	4099854137181	Silver Frame	410	20.99	108	Mono PERC	1722x1134x30	36	936
M410P54LM-BF-F3	4099854137297	Black Frame	410	20.99	108	Mono PERC	1722x1134x30	36	936

COMMERCIAL PANELS

Empowering your business with highly efficient panels



PRODUCT FEATURES

- Panel size above 2 m²
- Durable anodized aluminium frame
- 3.2 mm tempered glass
- IP68 junction box
- Wide operating temperature: -40 - +85° C
- Maximum static load up 5400 Pa
- MC4 EVO2 connectors
- Multi Bus Bar technology
- Bifacial panels with dual glass protection
- Also available in shorter cable length 0.3 m

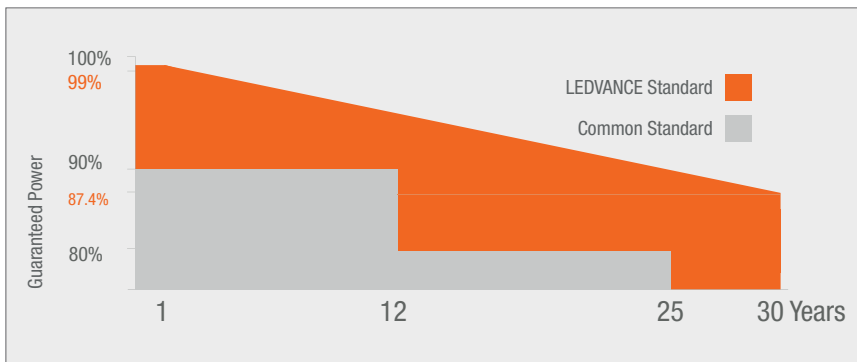
PRODUCT BENEFITS

- Durable design and highest quality component selection for long lasting performance
- Better weak illumination response
- Low light induced degradation for N-TOPCon Types
- Resistance to potential induced degradation
- Resistant to difficult weather conditions
- 12 years product guarantee for P-Type panels
- 15 years product guarantee for N-Type and all bifacial panels
- 25 years linear power guarantee for P-Type panels
- 30 years linear power guarantee for N-Type and all bifacial panels

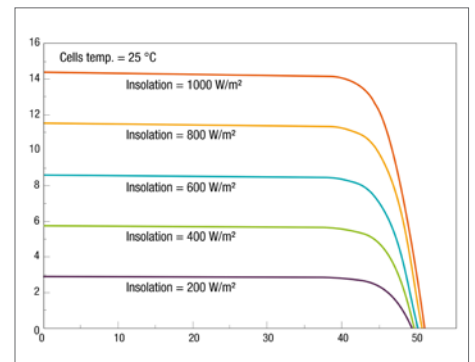
AREAS OF APPLICATION

- Commercial Buildings
- Suitable for various applications (rooftop, wall, ground mounting systems)

FURTHER PRODUCT DETAILS



Degradation for N-TOPCon Types



Current-voltage curve of module M580N72LM-SF-F3 4099854173370

SUPERIOR PANELS

Bifacial panels with highest energy yield and longer lifespan



Product name	EAN	Color	Wp	η(%)	Number of Half-Cut Cells	Solar Cells	L x W x H [mm]	Piece/Box	Piece/Container (40'HC)
M550P72LB-SF-F3	4099854173363	Silver Frame	550	21.29	144	Mono PERC	2278 x 1134 x 30	36	720
M580N72LB-SF-F3	4099854173387	Silver Frame	580	22.45	144	N-Type Topcon	2278 x 1134 x 30	36	720
M605P60UB-SF-F3	4099854199912	Silver Frame	605	21.37	120	Mono PERC	2172 x 1303 x 35	31	558
M660P66UB-SF-F3	4099854199929	Silver Frame	660	21.24	132	Mono PERC	2384 x 1303 x 35	31	558

PERFORMANCE PANELS

Larger module sizes for maximum roof energy yield



Product name	EAN	Color	Wp	η(%)	Number of Half-Cut Cells	Solar Cells	L x W x H [mm]	Piece/Box	Piece/Container (40'HC)
M470N60LM-SF-F3	4099854137266	Silver Frame	470	21.71	120	N-Type Topcon	1909 x 1134 x 30	36	864
M470N60LM-BF-F3	4099854137419	Black Frame	470	21.71	120	N-Type Topcon	1909 x 1134 x 30	36	864
M470N60LM-BB-F3	4099854189265	Full Black	470	21.71	120	N-Type Topcon	1909 x 1134 x 30	36	864
M580N72LM-SF-F3	4099854173370	Silver Frame	580	22.45	144	N-Type Topcon	2278 x 1134 x 30	36	720

VALUE PANELS

Larger module sizes for economical use of space



Product name	EAN	Color	Wp	η(%)	Number of Half-Cut Cells	Solar Cells	L x W x H [mm]	Piece/Box	Piece/Container (40'HC)
M450P60LM-SF-F3	4099854137198	Silver Frame	450	20.78	120	Mono PERC	1909 x 1134 x 30	36	864
M450P60LM-BF-F3	4099854137303	Black Frame	450	20.78	120	Mono PERC	1909 x 1134 x 30	36	864
M460P60LM-SF-F3	4099854137204	Silver Frame	460	21.24	120	Mono PERC	1909 x 1134 x 30	36	864
M460P60LM-BF-F3	4099854137310	Black Frame	460	21.24	120	Mono PERC	1909 x 1134 x 30	36	864
M450P60LM-BB-F3	4099854178962	Full Black	450	20.78	120	Mono PERC	1909 x 1134 x 30	36	864
M550P72LM-SF-F3	4099854173332	Silver Frame	550	21.29	144	Mono PERC	2278 x 1134 x 30	36	720
M550P72LM-BF-F3	4099854173349	Black Frame	550	21.29	144	Mono PERC	2278 x 1134 x 30	36	720
M540P72LM-BB-F3	4099854173356	Full Black	540	20.90	144	Mono PERC	2278 x 1134 x 30	36	720
M605P60UM-SF-F3	4099854137228	Silver Frame	605	21.37	120	Mono PERC	2172 x 1303 x 35	31	558
M605P60UM-BF-F3	4099854137334	Black Frame	605	21.37	120	Mono PERC	2172 x 1303 x 35	31	558
M660P66UM-SF-F3	4058075836020	Silver Frame	660	21.24	132	Mono PERC	2384 x 1303 x 35	31	558
M660P66UM-BF-F3	4058075836006	Black Frame	660	21.24	132	Mono PERC	2384 x 1303 x 35	31	558



INVERTERS LIVING THE EFFECT OF COST SAVING

YOUR PHOTOVOLTAIC CORE MAKES YOUR GENERATED ELECTRICITY USABLE

An inverter is the heart of your photovoltaic system, reducing your carbon footprint and allowing you to consume or sell the electricity you generate.

LEDVANCE offers high-efficiency string and hybrid inverters – both part of an open system and therefore compatible with various commercially available photovoltaic system compo-

nents such as batteries. Our inverters meet all regulatory and safety requirements and are easy to use. The integrated displays are of outstanding quality and allow easy monitoring. This makes LEDVANCE inverters the perfect complement to your solar panels, because we offer well thought-out solutions and understand how you want to design and build.

STRING INVERTERS

Single Phase Inverters

2.5/3/3.6/4/4.6/5/6kW



Three Phase Inverters

3/4/5/6/8/10/12/15/17/20kW



25/30/33/36/40kW



50/60kW



80/100/110kW



HYBRID INVERTERS

Single Phase Low Voltage Inverters

3/3.6/4.6/5/6kW



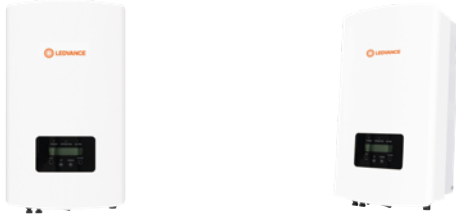
Three Phase High Voltage Inverters

5/6/8/10kW



STRING INVERTERS 1-PHASE

Easy to install inverters for use in residential applications with active arc flash protection



PRODUCT FEATURES

- Suitable for single phase operations
- Zero-export mode
- Remote firmware update
- Remote change of parameters
- Multifunctional datalogger
- DC reverse-polarity protection
- Low start-up voltage of 60V
- Wide operating temperature range: -25 - +60° C
- Integrated DC switch

PRODUCT BENEFITS

- Easy and offline configuration
- Built-in surge protection
- High efficiency >97.7%
- Multiple MPP trackers
- 10 years guarantee
- Online monitoring
- Anti-PID function (optional)
- AFCI function (optional)
- Remote monitoring via Smart App

DEDICATED FOR

- Residential market



Product name	EAN	Input (kW)	IMPP (A)	UMPP (V)	X* MPPT	η (%)	I MAX (A)	Output (kW)	dB (A)	Start-up Voltage (V)	Cooling
LS-2.5K F2	4099854168185	3.75	14/14	50-450V	2	97.3	13.3	2.5	≤20	60.00	natural convection
LS-3K F2	4099854168499	4.50	14/14	90-520V	2	97.3	15.7	3.0	≤20	120.00	natural convection
LS-3.6K F2	4099854168581	5.40	14/14	90-520V	2	97.3	16.0	3.6	≤20	120.00	natural convection
LS-4K F2	4099854168611	6.00	14/14	90-520V	2	97.6	21.0	4.0	≤20	120.00	natural convection
LS-4.6K F2	4099854168635	6.90	14/14	90-520V	2	97.6	23.8	4,6	≤20	120.00	natural convection
LS-5K F2	4099854168673	7.50	14/14	90-520V	2	97.7	25.0	5.0	≤20	120.00	natural convection
LS-6K F2	4099854168741	9.00	14/14	90-520V	2	97.7	27.3	6.0	≤41	120.00	natural convection

STRING INVERTERS 3-PHASE

Inverters for residential and commercial applications with active arc flash protection



PRODUCT FEATURES

- Zero-export mode
- Wide MPP voltage range
- Remote firmware update
- Remote change of parameters
- Multifunctional datalogger
- DC reverse-polarity protection
- Wide operating temperature range: -25 - +60° C
- Integrated DC switch

PRODUCT BENEFITS

- Easy and offline configuration
- Built-in surge protection
- High efficiency >98.7%
- Multiple MPP trackers
- 10 years guarantee
- Online monitoring
- Anti-PID function (optional)
- AFCI function (optional)
- Remote monitoring via Smart App

DEDICATED FOR

- Residential market
- Commercial market



Product name	EAN	Input (kW)	MPPT (A)	U _{MPPT} (V)	X* MPPT	η (%)	I _{MAX} (A)	Output (kW)	dB (A)	Start-up Voltage(V)	Cooling
LT-3K F2	4099854168239	4.5	16 per MPPT	160-1000	2	98.30 %	4.7	3	≤30	180	natural convection
LT-4K F2	4099854168253	6	16 per MPPT	160-1000	2	98.30 %	6.4	4	≤30	180	natural convection
LT-5K F2	4099854168277	7.5	16 per MPPT	160-1000	2	98.30 %	7.9	5	≤30	180	natural convection
LT-6K F2	4099854168291	9	16 per MPPT	160-1000	2	98.30 %	9.5	6	≤30	180	natural convection
LT-8K F2	4099854168338	12	16 per MPPT	160-1000	2	98.50 %	12.7	8	≤30	180	natural convection
LT-10K F2	4099854168437	15	16 per MPPT	160-1000	2	98.50 %	15.9	10	≤30	180	natural convection
LT-12K F2	4099854168567	18	32 per MPPT	160-1000	2	98.60 %	19.1	12	≤60	180	intelligent redundant fan cooling
LT-15K F2	4099854169168	22.5	32 per MPPT	160-1000	2	98.60 %	23.8	15	≤60	180	intelligent redundant fan cooling
LT-17K F2	4099854169212	25.5	32 per MPPT	160-1000	2	98.70 %	27	17	≤60	180	intelligent redundant fan cooling
LT-20K F2	4099854169250	30	32 per MPPT	160-1000	2	98.70 %	31.8	20	≤60	180	intelligent redundant fan cooling
LT-25K F2	4099854167683	37.5	32 per MPPT	200-1000	3	98.50 %	41.8	25	≤60	180	intelligent redundant fan cooling
LT-30K F2	4099854167706	45	32 per MPPT	200-1000	3	98.50 %	50.2	30	≤60	180	intelligent redundant fan cooling
LT-33K F2	4099854167720	49.5	32 per MPPT	200-1000	3	98.60 %	55.1	33	≤60	180	intelligent redundant fan cooling
LT-36K F2	4099854167744	54	32 per MPPT	200-1000	4	98.70 %	60.2	36	≤60	180	intelligent redundant fan cooling
LT-40K F2	4099854167768	60	32 per MPPT	200-1000	4	98.70 %	66.9	40	≤60	180	intelligent redundant fan cooling
LT-50K F2	4099854168062	75	32 per MPPT	180-1000	5	98.70 %	83.6	50	≤67	195	intelligent redundant fan cooling
LT-60K F2	4099854168086	90	32 per MPPT	180-1000	6	98.70 %	100.3	60	≤67	195	intelligent redundant fan cooling
LT-80K F2	4099854167904	120	40/32/40/32/40/32	160-1000	6	98.50 %	133.7	80	≤65	180	intelligent redundant fan cooling
LT-100K F2	4099854167942	150	40/32/40/32/40/32/40/32	160-1000	8	98.50 %	167.1	100	≤65	180	intelligent redundant fan cooling
LT-110K F2	4099854168000	165	40/32/40/32/40/32/40/32	160-1000	8	98.50 %	183.8	110	≤65	180	intelligent redundant fan cooling

HYBRID INVERTERS 1-PHASE LV

Inverters also suitable for connecting battery storage system for your energy independence



PRODUCT FEATURES

- Max. charging/discharging current of up to 125A
- Color LED display, IP66 protection
- Compatible with variety of batteries from different manufacturers
- 48V low voltage battery
- UPS level switching time (<10ms) supporting critical loads all the time

PRODUCT BENEFITS

- Easy and offline configuration
- Built-in surge protection
- High efficiency >97.5%
- Multiple MPP trackers
- 10 years guarantee
- Online monitoring
- Increased battery protection and operation features to extend battery life

DEDICATED FOR

- Residential market
- Commercial market



Product name	EAN	Input (kW)	X* MPPT	Output (kW)	η (%)	I MAX (A)	UMPPT (V)	dB (A)	Start-up Voltage(V)	Cooling
LHS-LV-3K F2	4099854168130	4.8	2	3	97.00 %	15	90-520	≤47	90	Natural convection
LHS-LV-3.6K F2	4099854168147	5.7	2	3.6	97.00 %	18.2	90-520	≤47	90	Natural convection
LHS-LV-4.6K F2	4099854168154	7	2	4.6	97.50 %	21	90-520	≤47	90	Natural convection
LHS-LV-5K F2	4099854168161	8	2	5	97.50 %	25	90-520	≤47	90	Natural convection
LHS-LV-6K F2	4099854168178	9.6	2	6	97.50 %	30	90-520	≤47	90	Natural convection

HYBRID INVERTERS 3-PHASE HV

Enabling high efficiency operation through high voltage battery system



PRODUCT FEATURES

- Max. charging/discharging current of up to 50A
- High voltage battery, higher efficiency
- UPS level switching time (<10ms) supporting critical loads all the time
- Color LED display, IP66 protection
- Supports unbalanced and half-wave-loads on the grid port and on the back-up port
- Compatible with variety of batteries from different manufacturers
- Automatic UPS switching & supports peak shaving mode

PRODUCT BENEFITS

- Easy and offline configuration
- Built-in surge protection
- High efficiency >98%
- Multiple MPP trackers
- 10 years guarantee
- Online monitoring

DEDICATED FOR

- Residential market
- Commercial market



Product name	EAN	Input (kW)	X* MPPT	Output (kW)	η (%)	I MAX (A)	U _{MPPT} (V)	dB (A)	Start-up Voltage(V)	Cooling
LHT-HV-5K F2	4099854 168093	8	3	5	97.90 %	7.6	200-850	≤47	160	Natural Convection
LHT-HV-6K F2	4099854 168109	9.6	3	6	97.90 %	9.1	200-850	≤47	160	Natural Convection
LHT-HV-8K F2	4099854 168116	12.8	4	8	98.00 %	12.2	200-850	≤47	160	Natural Convection
LHT-HV-10K F2	4099854 168123	16	4	10	98.00 %	15.2	200-850	≤47	160	Natural Convection



BATTERY STORAGE SYSTEM LIVING THE FEELING OF INDEPENDENCE

PROVIDES ENERGY WHENEVER YOU NEED IT

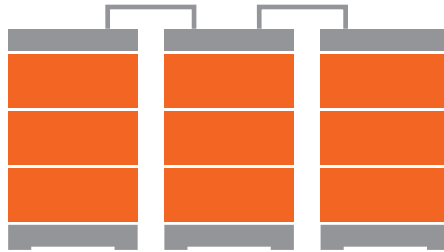
When more electricity is generated than you consume, you can use the batteries to store the electricity and use it when the sun is not shining. This allows you to increase your autonomy and self-consumption, which is profitable for both residential and commercial customers.

With capacities from 5 to 24 kWh and a modular design, our battery storage is flexible enough to adapt to your needs, and our app gives you an intelligent at-a-glance view of your battery status.

SIMPLE AND FLEXIBLE EXTENSION FOR YOUR INDIVIDUAL NEEDS



Effortless assembly



Simple layout



Quick expansion

LOW VOLTAGE BATTERY



3 Stack Module Low Voltage

HIGH VOLTAGE BATTERY



4 Stack Module High Voltage

LOW VOLTAGE BATTERIES

Modular energy storage battery system for the most efficient use of your solar energy



PRODUCT FEATURES

- Thermal management system
- IP65, anti-corrosion grade $\geq C2$
- SOC LED display for battery energy level status
- Control box included in every stack of the energy storage system

PRODUCT BENEFITS

- Easy and offline configuration
- Built-in explosion relief device
- Stacks are connected in parallel without cable connection
- 10 years guarantee
- Easy stack expanding without need for additional configuration
- Safe
- Environmental friendly

DEDICATED FOR

- Residential market
- Commercial market

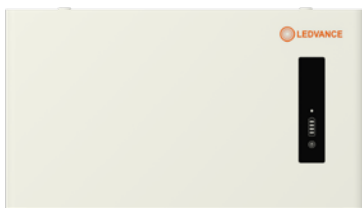
BATTERY SIZING



Battery Module Quantity	V	kWh	Usable Energy
1	51.2	5.12	4.864
2	51.2	10.24	9.728
3	51.2	15.36	14.592
4	51.2	20.48	19.456

MANDATORY SYSTEM COMPONENTS

Product name	Description	EAN	Battery Type	V	Peak Discharge Current	Ingress Protection
LES-LV-5K	Low voltage battery module	4099854199882	LiFePO4	40.0-58.4	100	IP65
LES-LV-SYS100	Battery module base with 1m communication and power cables	4099854199899	*			
LES-LV-SYS200	Battery module base with 2m communication and power cables	4099854199905	*			



Low voltage battery module



Battery module base



Power cables



Communication cable

* Accessory kit containing base, cables and mounting components

HIGH VOLTAGE BATTERIES

Highly efficient modular energy storage battery system with long cycle life



PRODUCT FEATURES

- Thermal management system
- IP65, anti-corrosion grade $\geq C2$
- Remote software monitoring
- High-voltage energy storage provides superior performance
- SOC LED display for battery energy level status

PRODUCT BENEFITS

- Easy and offline configuration
- Built-in explosion relief device
- Stacks are connected in series without cable connection
- 10 years guarantee
- Easy stack expanding without need for additional configuration
- Safe
- Environmental friendly

DEDICATED FOR

- Residential market
- Commercial market

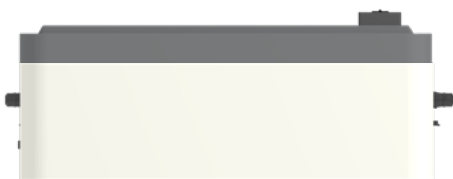
BATTERY SIZING



Battery Module Quantity	V	kWh	Usable Energy
2	204.8	8.192	7.782
3	307.2	12.288	11.673
4	409.6	16.384	15.565
5	512.0	20.480	19.456

MANDATORY SYSTEM COMPONENTS

Product name	Description	EAN	Battery Type	V	Peak Discharge Current	Ingress Protection
LES-HV-4K	High voltage battery module with 4.096 kWh	4099854199868	LiFePO4	102.4	40	IP65
LES-HV-SYS	Cluster Control Box, Battery Module Base with 2m Communication and Power Cables	4099854199875	*	185.6-691.2		IP65



High voltage battery module



High voltage battery cluster control box



Battery module base

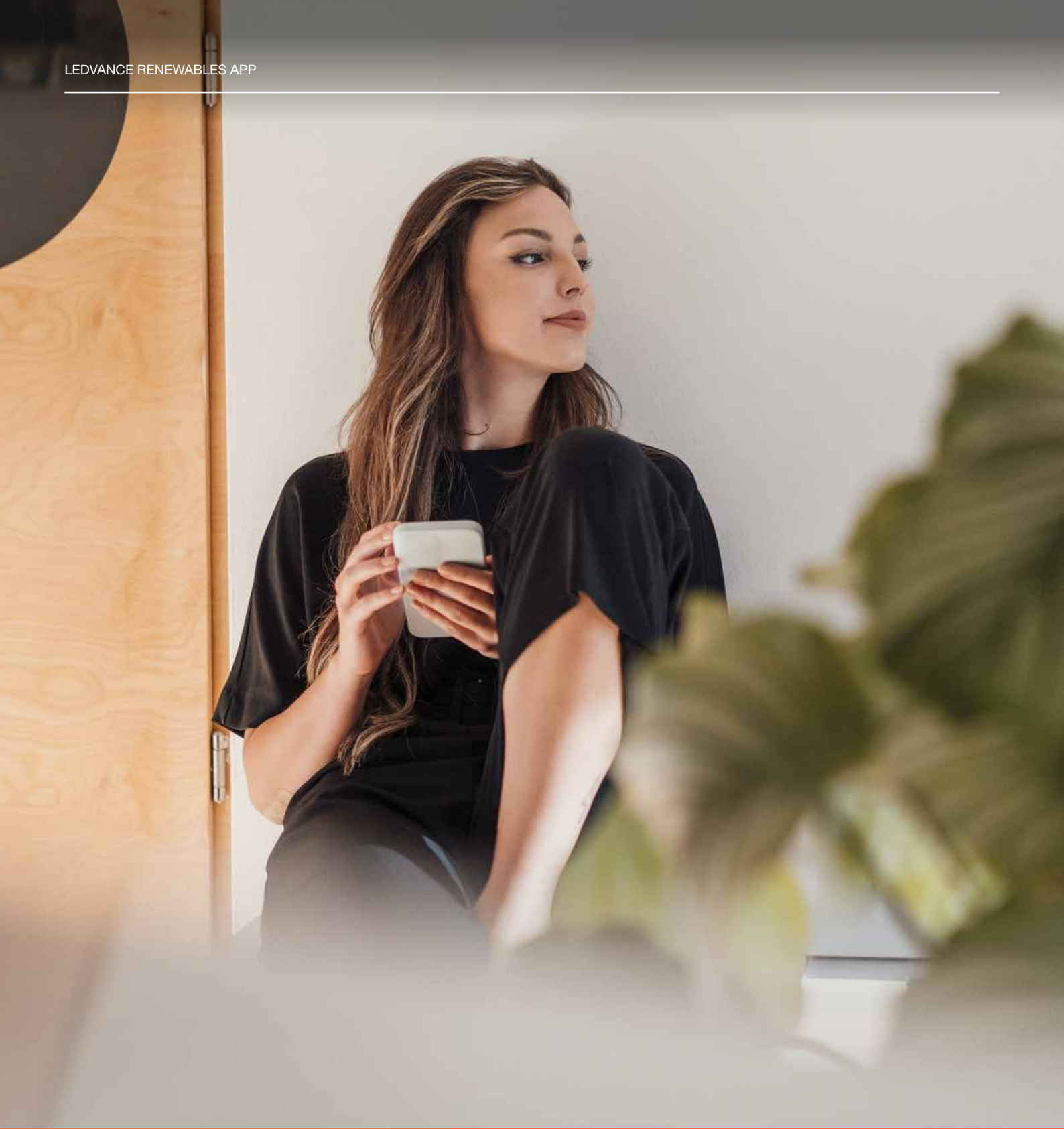


Communication cable



Power cables

* Accessory kit containing control box, base, cables and mounting components

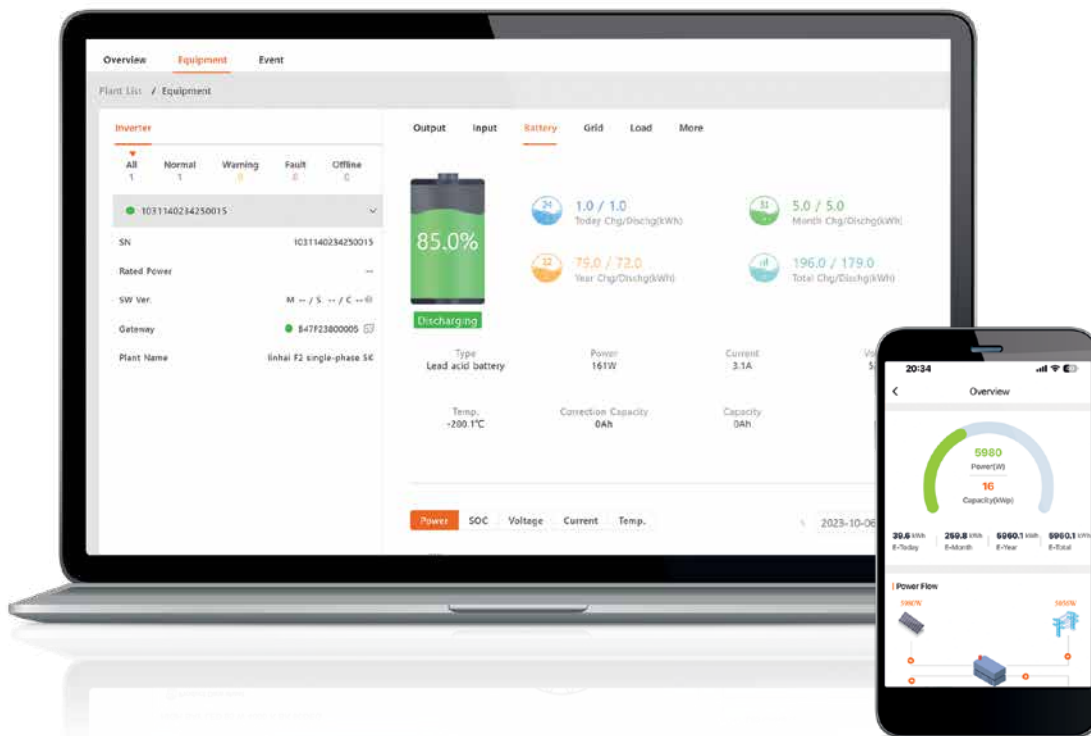


**LEDVANCE RENEWABLES APP
LIVING THE COMFORT OF
INTELLIGENT ENERGY
MANAGEMENT**

EXPERIENCE SMART SUSTAINABILITY USING A SINGLE APP FOR YOUR ENERGY NEEDS

With our smart solutions you can manage your Renewables photovoltaic system. The app provides a quick overview of all the important data from your energy management – advancing light and solar energy. You get status reports on your system, your batteries and your

inverters, even when you are on the move. By measuring electricity prices online and deciding when it is most profitable to sell electricity back to the grid, you can then use the Renewables App to do this, helping you to get the most out of your photovoltaic system.



The LEDVANCE cloud-based photovoltaic monitoring platform provides the following features:

- ▶ Utilizes a European Union-based cloud infrastructure for secure data storage.
- ▶ Offers real-time and historical energy production data, allowing users to track the system's performance over time.
- ▶ Automatically generates alerts and notifications in the event of system failures, downtime, or performance issues, ensuring prompt response to potential problems.
- ▶ Allows for remote control and integration of weather data to assess the system's performance in real-time, enhancing its efficiency.
- ▶ Offers mobile access, enabling users to monitor their photovoltaic systems from smartphones and tablets.
- ▶ Facilitates data export for in-depth analysis and supports multiple photovoltaic systems, allowing users to manage multiple installations with ease.
- ▶ Features an intuitive and user-friendly interface that simplifies navigation and data comprehension. It also includes user access controls to enhance security and protect sensitive information.

ABOUT LEDVANCE



LEDVANCE

With subsidiaries in more than 50 countries and business activities in over 140 countries, LEDVANCE is one of the world's leading companies in the field of general lighting for professional customers and end users. Emerging from OSRAM's general lighting division, LEDVANCE's portfolio includes a wide range of LED luminaires for a variety of applications, intelligent lighting products for smart homes and smart buildings, one of the most comprehensive offerings of advanced LED lamps in the lighting industry, and traditional lamps. Beyond lighting, LEDVANCE offers vertically integrated, renewable energy solutions for the building sector. Together, the lighting division and the renewable energy division form a comprehensive ecosystem for residential, commercial, and industrial buildings.

For more information, visit www.ledvance.com.

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