

### We have the solution

Best in PV usage with HEAT PUMP technology





NORD HT brings a new generation of energy solutions for the homes of the future. We don't manufacture another heat pump, photovoltaic panel, or battery – we create a connected system that integrates and optimizes all these technologies to achieve maximum energy efficiency.

Our goal is to make energy work for you - smartly, efficiently, and sustainably.

We are part of **Nordic Edge**, a prestigious innovation network that includes companies such as **Microsoft, Google**, and **Amazon**, and we cooperate with the **Norwegian University of Stavanger** and the **Polish Academy of Sciences**. **Together with these institutions and within our own R&D laboratories, we continuously develop and enhance the NORD control software** to expand its capabilities, improve efficiency, and maintain our technological leadership. Through this, we **combine science**, **innovation**, **and technology** into solutions that help homes use energy intelligently, efficiently, and with respect for the future.









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nd technology connectivity



EcoControl and EcoSmart Module - Smart home central control



**Heating technology** 



Photovoltaic technology



EcoSeries II | EcoMaster | EcoStorage | EcoCharge



Heat recovery and ventilation



**EcoAir Flow** 

**Power Genius** 



Power Genius 3000 | Power Genius PRO

# **About NORD HT**

#### NORD Story – Innovation from Norway



Since 2014, the NORD HT team has been developing advanced energy solutions supported by Norwegian funds and leading European universities. Our system seamlessly integrates photovoltaics, heating, battery storage, and electromobility, ensuring maximum efficiency and sustainability for modern homes.

# **European Quality & Local Commitment**



Made in the EU, ensuring topquality standards, durability and sustainability. NORD HT EU production bases secure 68% of NORD HT's product range. We actively support local sub-suppliers, reinforcing our commitment to innovation, reliability, and responsible production with a reduced environmental impact.

# Secure & Smart Energy Management



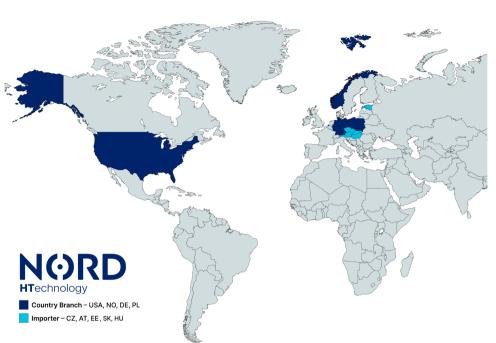
NORD HT's IT infrastructure and development are based in Europe, ensuring secure and reliable operation of EcoCloud on EU-based data servers hosted by Amazon. Cybersecurity is a top priority, protecting clients from threats while ensuring safe, efficient, and intelligent energy management.

# Innovative Solutions for Maximum Efficiency



NORD HT delivers cutting-edge energy solutions, including the patented EcoBoiler and unique OptiMode and EcoMode, among many other features, ensuring outstanding energy efficiency, optimized consumption, and smarter energy management for modern homes and businesses.

**NORD HT** connects the worlds of photovoltaics, heating, and electromobility into one intelligent system. **Since its founding in 2014** with support from Norwegian funds, the company has been developing and delivering solutions for homes and small commercial buildings aiming for energy independence, cost efficiency, and environmental sustainability.







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# Discover the Intelligent NORD Home

A Unique System for Heating, Photovoltaics and Heat Recovery

Photovoltaic Technology Heating Technology Ventilation and Heat Recovery



One manufacturer. One system. One application.



# All your home technologies. Connected. Controlled. Efficient.

The NORD system integrates heating, photovoltaics, ventilation, energy storage, and EV charging into one complete solution. Every component – from the heat pump to the ventilation unit – communicates with each other and is managed by the system's central brain, the EcoControl unit. Unlike standard combinations of products from different brands, NORD HT offers a unified solution from a single manufacturer – with guaranteed compatibility, higher efficiency, easier installation, and unified service. Everything is clearly controlled via one single app.

For the user, this means more than just convenience: greater energy independence, significant savings, a healthy indoor climate, and smart control.







**Photovoltaic Technology** 

**Heating Technology** 

**Ventilation and Heat Recovery** 

# **Energy that works for you**

The primary energy source is your own photovoltaic system. The electricity it generates is instantly used to power your household – **from heating and hot water to ventilation**. Any surplus is stored in a battery system or efficiently converted into heat. **The system intelligently decides how and where to direct the energy** – whether to use it immediately, store it for later, or distribute it among various technologies. This significantly **reduces dependence on the grid and maximizes the use of renewable energy**. Through this smart management, an ordinary home becomes an intelligent energy ecosystem.



## Smart functions that make a difference



Maximum self-consumption of solar energy



Remote management and automation



Full device compatibility



## **EcoControl – Intelligent home energy management**

EcoControl is the brain of the NORD system, intelligently managing heating, ventilation, and energy distribution. Thanks to the EcoMode, OptiMode, and Tariff Control\* algorithms, it maximizes the overall efficiency of the system.

### EcoMode - Maximize solar energy usage

EcoMode intelligently manages PV energy surpluses and minimizes electricity consumption from the grid. Excess energy is stored in domestic hot water tanks, underfloor heating, batteries, and thermal storage tanks for later use.





### **EcoCloud - Control your system from anywhere**

EcoCloud enables remote system management, access to statistics and performance graphs. All data is securely stored on Amazon Cloud. The software is developed in the EU, ensuring data security, privacy, and reliability.

## **OptiMode – Smart heating with savings**

OptiMode optimizes the operation of the heat pump, reducing energy consumption and limiting defrost cycles, thereby increasing COP in the outdoor temperature range of +2 °C to -4 °C.



## **EcoCloud & EcoDirect - Smart control from anywhere**





The EcoCloud platform and EcoDirect mobile app are designed for easy management of the entire NORD system. EcoCloud provides secure remote access to the EcoControl system via an internet module. The EcoDirect app allows intuitive configuration and control of devices - including EcoFloor modules - directly from your smartphone via Bluetooth.

#### EcoCloud:

- () Full system overview
- **(**) Real-time diagnostic charts
- **(**) User settings
- () Service/installation settings
- () Operating mode control

- Scheduling of operation
- Online technical support
- **(**) Remote software upgrades
- Reduced service costs (remote access to installation)
- Alarm notifications

#### **EcoDirect:**

- **(**) **EcoCloud registration**
- **(**) Available for iOS and Android
- **(**) Local service settings
- **(**) Local installation settings
- **(**) Operating mode control





















# **EcoControl**

Intelligent control panel for the entire NORD system





EcoControl is the central unit that connects all NORD system technologies - from photovoltaics and heating to ventilation and electric vehicle charging.

# EcoControl – central control for your entire energy system



**EcoControl is the central intelligence of the NORD system**, seamlessly connecting all key components – **from photovoltaics and heating to ventilation**, heat recovery, and electric vehicle charging. It manages the entire energy flow within the home and automatically decides whether to consume electricity, store it, or draw from alternative sources.

It optimizes energy management using smart modes such as EcoMode, OptiMode, or Tariff Control, allows for precise scheduling, and provides **remote access through the EcoCloud platform**. All data is available in real-time – either on the touchscreen panel or through the mobile application.

Thanks to its intuitive interface and expandability to multiple heating circuits or zone control, EcoControl is ready for any type of home – **from apartments to larger family houses or apartment buildings**.





Main screen with temperature details of the selected room



Operating details of the EcoHeat heat pump



Individual heating schedule for the selected room with EcoMode enabled

## **EcoControl – Control Interfaces and Sensors**





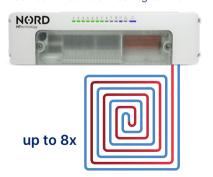








EcoFloor underfloor heating controller





**Smart details that complete the whole**. At the heart of the NORD system is the EcoControl unit – but true comfort comes from every part of it. From the wall thermostat that lets you easily adjust the temperature in your living room, to the touch display with a clear user interface, and the outdoor sensor that responds to weather changes.

All components work together to keep your home comfortable – effortlessly, without unnecessary losses or complex setup.

## **EcoCloud – remote monitoring and control**



Stay in **control of your entire system – anytime, from anywhere**. The EcoCloud platform allows you to **monitor the current status of your NORD system in real time:** energy production and consumption, heat pump performance, battery levels, room temperatures, and outdoor conditions. Clear graphs and statistics help you evaluate the efficiency of each device and the system as a whole. **All data is securely stored on Amazon Cloud** within the EU – with maximum privacy protection and system reliability.

Combined with the EcoDirect mobile app, you can manage the entire system conveniently from your phone or tablet – adjust settings, plan operation modes, and adapt performance to real conditions. **Monitoring. Savings. Comfort.** 











# **EcoSmart Module**

Intelligent module for dynamic energy management



More information



EcoSmart Module brings smart consumption control to the household based on dynamic energy prices, photovoltaic surpluses, and weather forecasts. In combination with the EcoControl unit, it optimizes heating, domestic hot water, and other appliances so that the household can use as much self-generated and low-cost electricity from the grid as possible. At the same time, it replaces the EcoCloud and ISM modules, resulting in fewer devices and a simpler system.



#### COST SAVINGS THROUGH DYNAMIC TARIFFS

EcoSmart optimizes energy consumption based on current electricity prices and photovoltaic surpluses. The NORD Dynamic Tariff Control algorithm can reduce household operating costs by up to 25%, allowing you to pay less without changing your habits.



#### **ALL-IN-ONE SOLUTION**

The EcoSmart Module replaces two separate modules—EcoCloud and ISM—combining their functions into a single device. It provides remote system management, cloud communication, and wireless thermostat support—all without the need to install additional hardware. The result is easier installation, lower hardware costs, and a cleaner setup for both users and service technicians.



# MAXIMUM UTILIZATION OF OWN ENERGY PRODUCTION AND DYNAMIC TARIFFS

The EcoSmart Module retrieves current electricity prices and sends them to the EcoControl, which optimizes appliance operation accordingly. When prices are high, it reduces heating output; when prices are low, it uses cheap energy for preheating. Combined with the EcoMode function, the household efficiently utilizes its own photovoltaic power and low-cost grid electricity – increasing both self-sufficiency and return on investment.



#### INTEGRATION OF ALL DEVICES IN A SINGLE SYSTEM

The EcoSmart Module, together with the EcoControl unit, forms an intelligent platform for managing the entire household. EcoSmart provides information on energy prices and weather conditions, while EcoControl uses this data to optimize heating and hot water operation – resulting in higher efficiency and lower grid consumption.

#### TECHNICAL DATA

#### **EcoSmart Modul**

IP Protection rating	IP 20
Ambient operating temperature	0 - 50 °C
Relative humidity	5 to 85%, non-condensing
Data transmission	1 x RS485 (Modbus RTU); WiFi 2.4 GHz IEEE 802.11 b/g/n; Bluetooth v4.2 LE; ISM in the 865–868 MHz band
Maximum load current on contact output	AUX A: 230 VAC, 3 A continuous (8 A peak); AUX B: 230 VAC, 3 A continuous (8 A peak)
Maximum load current on outputs	FLOW: 5 VDC, 80 mA; SYSTEM: 12 VDC, 400 mA
Overall dimensions	140 × 105 × 44 mm
Standards	PN-EN 60730-2-9
Installation	Wall mounting
Order code	E-525-208

# Discover the Intelligent NORD Home

A Unique System for Heating, Photovoltaics and Heat Recovery



In the NORD system, heating is not just about warmth – it's about smart energy management. At the center is the EcoHeat heat pump, which provides both space heating and domestic hot water. The system itself determines how to use the generated heat – whether to store it, direct it to underfloor heating, or use it for water heating. All devices are primarily powered by self-produced solar energy or battery storage. If needed, energy is supplemented from the grid – always in the most efficient way possible. Thanks to seamless communication between all components and intelligent control, the system delivers maximum savings and comfort.



#### **EcoHeat**

Air-to-water heat pump. The main heat source for heating and hot water preparation.



#### **EcoHeat FP**

Next-generation air-to-water heat pump – higher output temperature (up to 75 °C) and eco-friendly refrigerant R290.



#### **EcoFresh Tank**

Domestic hot water tank with elliptical heat exchanger – efficient water heating using a heat pump.

#### **EcoHeat Storage**

Buffer tank with integrated ECoil Direct heating element – stores thermal energy from the heat pump or electricity from PV, battery, or the grid.



#### **EcoBoiler & EcoBoiler Hybrid**

Both models feature efficient layered water heating using electricity from photovoltaics, battery, or grid. The Hybrid version additionally includes a heat exchanger, allowing water to be heated by a heat pump or a thermal storage unit.



#### **EcoFloor**



Zonal underfloor heating controller – precise temperature control in each room. Supports up to 8 heating zones per module, with expansion possible. Optimizes energy consumption and ensures maximum thermal comfort throughout the home.







#### **HIGH-QUALITY COMPRESSOR**

The Panasonic compressor used in the NORD EcoHeat ensures high efficiency and reliability, resulting in low electricity consumption and optimal performance for heat production.



#### **OPTIMODE - SMART HEATING WITH SAVINGS**

OptiMode optimizes the heat pump's operation, reducing energy consumption and minimizing defrost cycles, thereby increasing COP in the outdoor temperature range from +2°C to -4°C.



#### **ECO-MODE OPERATION**

Thanks to its unique functionality, you can maximize the use of surplus photovoltaic energy with your heat pump whenever it's available. Unlock the full potential of the system with EcoControl and EcoMaster to maximize your savings today!



#### PHOTOVOLTAIC READY

Smart Grid readiness confirms that the NORD EcoHeat heat pump can intelligently cooperate with third-party systems based on standardized load management interfaces.

TECHNICAL DATA	5.0 F	7.0 F	9.0 F	12.0 F	16.0 F	18.0 F	22.0 F
NORD EcoHeat MB - ErP level (35 °C)	A+++	A+++	A+++	A+++	A+++	A+++	A+++
NORD EcoHeat MB - ErP level (55 °C)	A++	A++	A++	A++	A++	A++	A++
A7W35 - HEATING - Nominal output (kW)	5.0	7.0	9.0	12.5	16.0	18.0	22.0
A35W7 - COOLING - Nominal output (kW)	3.5	5.0	6.4	9.7	12.0	12.4	14.0
POWER SUPPLY - Power supply (V / Phase / Hz)	200/1/50	200/1/50	380/3/50	380/3/50	380/3/50	380/3/50	380/3/50
SCOP (55 °C)	4.56	5.07	4.84	4.50	4.89	4.50	4.62
REFRIGERANT - Type / GWP	R32/675	R32/675	R32/675	R32/675	R32/675	R32/675	R32/675
COMPRESSOR - Type	Panasonic EVI						
PACKAGING - Dimensions L × W × H (mm)	1298×4	193×891		1298×493×891		1298×4	193×1400
PACKAGING - Net weight (kg)	100	100	115	115	115	120	120
Order code	P-525-005f	P-525-007f	P-525-009f	P-525-012f	P-525-016f	P-525-018f	P-525-022f



Highly efficient heat pump

Models: MB 7.0 F1P | MB 10.0 F1P | MB 12.0 F3P | MB 20.0 F3P



NORD EcoHeat FP is a modern heat pump using the eco-friendly refrigerant R290, offering outstanding efficiency with minimal environmental impact. With an output temperature of up to 75 °C, it is ideal for heating even older buildings with radiators. A high-performance Panasonic compressor ensures excellent output, while energy-saving modes OptiMode and EcoMode allow maximum use of excess photovoltaic energy. EcoHeat FP provides efficient heating, DHW heating and cooling – quietly, economically and with A+++ energy efficiency.





#### **ENVIRONMENTALLY FRIENDLY REFRIGERANT - R290**

NORD EcoHeat uses R290 – a natural propane refrigerant with an ultra-low global warming potential (GWP  $\approx$  3). It offers excellent energy efficiency and minimal environmental impact – a sustainable choice that doesn't compromise on performance.



#### **ECO-MODE OPERATION**

Thanks to its unique functionality, you can maximize the use of surplus photovoltaic energy with your heat pump whenever it's available. Unlock the full potential of your system with EcoControl and EcoMaster, and start maximizing your savings today!



#### HIGH OUTPUT TEMPERATURE

Compatible with traditional radiators — water temperatures up to 75  $^{\circ}$ C allow easy integration into existing heating systems without costly modifications.



#### **OPTIMODE - SMART HEATING WITH SAVINGS**

Save energy with the NORD EcoHeat system. EcoHeat reaches an EU energy efficiency rating of A+++, ensuring greater thermal comfort with lower costs for users.

TECHNICAL DATA	7.0 F1P	10.0 F1P	12.0 F3P	20.0 F3P		
NORD EcoHeat MB - ErP level (35 °C)	A+++	A+++	A+++	A+++		
NORD EcoHeat MB - ErP level (55 °C)	A++	A++	A++	A++		
A7W35 - HEATING - Nominal output (kW)	7.02	10.04	11.95	19.56		
A35W7 - COOLING - Nominal output (kW)	4.51	7.35	8.52	12.55		
POWER SUPPLY - Power supply (V / Phase / Hz)	220/1/50	220/1/50	380/3/50	380/3/50		
SCOP (35 °C)	4.60	4.56	4.80	4.90		
REFRIGERANT - Type / GWP	R290/3	R290/3	R290/3	R290/3		
COMPRESSOR - Type	Highly	Panasonic EVI				
Dimensions L × W × H (mm)		1288×514×888 1288×514×1397				
Net weight (kg)	121	125	125 153			
Order number	P-525-207p	P-525-210p	P-525-212p	P-525-220p		

### **EcoHeat - Accessories**

#### **Direct pump group**

Direct pump group with Wilo circulation pump.

Order no. P-525-212



#### Mixing pump group

Mixing pump group with Wilo 230 V circulation pump, suitable for regulating the heating water temperature in heating systems.

Order no. P-525-213



#### **Demineralization unit**

Demineralization unit for the preparation of filling water for heating and cooling circuits. Provides protection against limescale deposits and helps reduce the risk of corrosion.

Order no. P-525-216





#### Manifold for pump groups

Manifold designed for connecting multiple pump groups, with robust construction and easy installation.

Order no. P-525-214



#### Manifold end cap

End cap for pump group manifolds, ensuring safe and tight sealing.

Order no. P-525-215



#### Anti-freeze valve 1"

Automatic anti-freeze valve designed for monoblock heat pumps. Protects the system from damage at low temperatures.

Order no. P-525-203



#### Three-way valve for DHW 1"

Switching valve for DHW / heating water, supplied with 230 V actuator. Fully compatible with the EcoControl unit.

Order no. P-525-204



#### **SafeHeat**

Backup anti-freeze system with integrated battery, protecting the heat pump during power outages.

Order no. P-525-201



#### **Hydrobox**

Bivalent hydraulic module with flow heater and three-way valve. Supports the heat pump in DHW and heating water preparation under extremely low temperatures.

Order no. P-525-202



#### Magnetic filter 1"

Magnetic filter for heating and cooling circuits, effectively capturing impurities and extending the service life of pumps and heat exchangers.

Order no. P-525-206

## **EcoHeat - Accessories**





#### Water test kit

Practical kit for quick and accurate measurement of key water parameters in heating and cooling systems.

Order no. P-525-218



#### **Heat pump stand**

Universal stand for EcoHeat heat pumps – compatible with all models thanks to standardized anchor spacing.

Order no. P-525-211



#### Set of anti-vibration pads

Set of anti-vibration pads for heat pumps, minimizing noise and vibration transmission.

Order no. P-525-210

#### ECoil Direct - Electric heating elements for maximum use of surplus energy

NORD ECoil Direct heating elements are designed for efficient storage of surplus photovoltaic energy directly into water in the storage tank. In combination with EcoHeat Storage, they enable the creation of a reliable bivalent or backup heat source for the heat pump. With simple installation, built-in overheating protection, and various power options, they are the ideal solution for maximum household energy self-sufficiency.



#### **ECoil Direct 1.15 / 1.20**

Compact heating elements with an output of 1.5–2.0 kW for smaller tanks.

Order no. O-525-411 / Obj. č. O-525-412



#### **ECoil Direct 3.45**

More powerful 4.5 kW variant, ideal for medium storage tanks.

Order no. 0-525-432



#### ECoil Direct 3.60 R/C / 3.90 R/C

High-performance heating elements with output control, 6–9 kW, suitable for large tanks and demanding applications.

# **EcoHeat Storage**

**Buffer Tank for Maximum Energy Utilization** 

Models: 50 L | 100 L | 150 L | 250 L | 400 L | 500 L | 800 L | 1000 L | 1500 L | 2000 L



NORD EcoHeat Storage is an innovative buffer tank designed to efficiently store surplus energy from photovoltaics or a heat pump in the form of thermal energy. Thanks to its special insulation, it minimizes heat loss and enables the stored energy to be used later. By reducing the frequency of heat pump startups, it extends the pump's lifespan and ensures smooth operation of the heating system. EcoHeat Storage is available in capacities from 50 to 2000 liters, making it a key component for improving energy independence and efficiency in your home.

More information







#### THE MOST AFFORDABLE "BATTERY" IN THE WORLD

Store electricity as heat in the most affordable "battery" in the world – a hot water tank with an unlimited number of charging cycles.



#### MORE EFFICIENT OPERATION OF YOUR HEAT PUMP

Placing the buffer tank before the heating circuits reduces the number of heat pump start-ups, thereby extending its lifespan. It also improves the defrosting process and ensures smooth and uninterrupted operation of your heating system.



#### **BACKUP HEAT SOURCE FOR YOUR HEAT PUMP**

By combining the NORD EcoHeat Storage with the NORD ECoil heating element, you can create a bivalent and backup heat source for your heating system.



#### SUPPORT FOR COOLING WITH ECOHEAT HEAT PUMP

NORD EcoHeat Storage tanks feature high-performance insulation, allowing seamless operation with EcoHeat heat pumps for cooling your home during hot summer days.

TECHNICAL DATA	3/50	6/100	8,5 / 100	15 / 250	25 / 400	28,5 / 500	48 / 800	58 / 1000	87 / 1500	116 / 2000
Volume [I]	50	105	147	262	433	500	800	1000	1500	2000
Electric energy storage [kWh]	3	6	8,5	15	25	28,5	48	58	87	116
Height [mm]	625	1060	1400	1525	1728	2010	1995	2090	2400	2160
Outer diameter [mm]	470	540	540	650	810	810	990	1110	1210	1410
Weight [kg]	28	40	50	67	95	120	170	190	285	375
Thermal insulation	Polyurethane Foam									
Thermal insulation thickness [mm]	25	70	70	70	100	100	100	100	100	100
Maximum operating pressure [MPa]	0,3	0,3	0,3	0,3	0,3	0,3	0,3	0,3	0,3	0,3
Maximum operating temperature [C°]	80	80	80	80	80	95	95	95	95	95
Order number	0-525-199	0-525-200	0-525-201	0-525-203	0-525-205	0-525-206	0-525-207	0-525-208	0-525-209	0-525-210



DHW tank for heat pumps

Models: 220 L | 300 L



The NORD EcoFresh Tank is a modern domestic hot water (DHW) tank designed for maximum performance and energy savings. Its special elliptical heat exchanger with an extended transfer surface ensures faster and more efficient water heating – especially when paired with NORD EcoHeat heat pumps. Its slim, space-saving design allows for easy installation even in smaller utility rooms.





#### TECHNOLOGY FOR MAXIMUM PERFORMANCE AND SAVINGS

A specially designed elliptical heat exchanger significantly increases the surface area for heat transfer, resulting in higher efficiency than standard tanks. This innovative solution, developed for use with NORD EcoHeat heat pumps and the NORD EcoControl energy management system, enables faster heating of domestic hot water (DHW) compared to conventional tanks of the same capacity.



#### ADVANCED HEAT EXCHANGER TECHNOLOGY

The unique manufacturing process of the elliptical heat exchanger allows the tube to be flattened and coiled while maintaining its structural integrity, durability, and performance



#### **OPTIMIZED CAPACITY FOR MAXIMUM EFFICIENCY**

The NORD EcoFresh Tank 300 offers a usable volume of 291 liters, while the NORD EcoFresh Tank 220 provides 203 liters – ensuring sufficient hot water supply for various household needs.



#### **SLIM TANK DESIGN**

The narrow shape of the tank is designed to save space, making it an ideal solution for technical rooms with limited space.



TECHNICAL DATA	220	300		
Usable volume [I]	203	291		
Exchanger surface area [m²]	2,6	3,8		
Exchanger volume [I]	12,8	19,5		
Heating capacity (kW) - 80/10/60C°	43,4	65,4		
Heating capacity (kW) - 80/10/60C°	27,4	41,2		
Stop losses ** [W]	52	72		
Pressure loss [mbar]	140	210		
Tank operating parameters [dm³]	maximum operating pressure and temperature pr = 0,6 MPa tr = 80 °C			
Parameters of heating medium [dm³]	maximum operating pressure and temperature pr = 0,6 MPa tr = 110 °C			
Order number	0-525-301	0-525-302		

<sup>24</sup> 

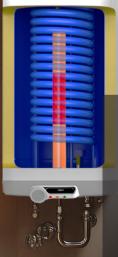


Hybrid water heater for maximum efficiency

Model: 160







The NORD EcoBoiler Hybrid is an innovative layered storage tank that efficiently utilizes surplus energy from both photovoltaics and a heat pump. With its patented layered heating technology, it enables up to 70% self-sufficiency in solar energy use—even during winter months. Three heating zones ensure precise and energy-efficient charging, while a 1.45 m² heat exchanger provides rapid and effective water heating.





#### LAYERED STORAGE TANK WITH OPTIMIZED SECTORS AND COMFORT ZONE

#### **DIVIDED HEATING ZONES ALLOW LOW-POWER HEATING ROD CHARGING**

Optimized zoning of the tank ensures a continuous supply of hot water while maximizing the efficiency of your photovoltaic system.

By segmenting the tank volume, the system reduces energy consumption while maintaining constant availability of hot water.



#### OPTIMAL USE OF PV EVEN ON CLOUDY DAYS

**OPTIONAL HEATING VIA HEAT PUMP** 



Low charging power enables efficient use of solar energy without drawing

#### **EFFICIENCY UP TO 70%**



from the grid - even during transitional seasons.

EcoBoiler Hybrid 160 is equipped with a 1.45 m<sup>2</sup> heat exchanger for rapid

When operating independently with a 1.5 kWp photovoltaic system, energy self-sufficiency can exceed 70% of total demand.

## heating from an external source.

**TECHNICAL DATA** 

160

Material of storage tank	Steel, enamelled, with protective anode
Volume of storage tank [I]	150
Dimensions H × W × D [mm]	1235×520×550
Heat exchanger surface	1,45m²
Heat exchanger volume	9,51
Max. operating pressure [bar]	6
Max. operating temperature [°C]	90
Weight [kg]	79
Storage tank insulation	Pressure-foamed rigid PU foam, freon-free
Order number	0-525-199







# LAYERED STORAGE WITH OPTIMIZED SECTORS AND COMFORT ZONE

# WALL-MOUNTED VARIANT WITH LOW INSTALLATION DEPTH

Intelligently optimized zone distribution ensures continuous hot water supply while effectively maximizing the use of solar energy.

Designed for discreet and aesthetic integration into partition walls, requiring only 250 mm of installation depth.



TECHNICAL DATA

#### OPTIMAL USE OF PHOTOVOLTAICS EVEN ON CLOUDY DAYS

Low charging power enables efficient use of solar energy without drawing additional power from the grid—even during transitional months.

160



140 ELAT

#### **EFFICIENCY UP TO 70%**

When operating independently with a 1.5 kWp photovoltaic system, energy self-sufficiency can exceed 70% of demand.

140 EL ATA

TECHNICAL DATA	160	140 FLA I	140 FLA I +		
Storage tank material	Steel, enamelled, with protective anode	Stainless steel 1.4571 (V4A), pickled in a bath	Stainless steel 1.4571 (V4A), pickled in a bath		
Storage tank volume [I]	152	140	140		
Dimensions H × W × D [mm]	1235×520×550	1750×920×200	1750×920×250		
Max. operating pressure (bar)	6	6	6		
Max. operating temperature (°C)	90	95	95		
Weight (kg)	51	80	85		
Storage tank insulation	Lacquer-foamed rigid PU foam, freon-free	Lacquer-foamed rigid PU foam, freon-free	Lacquer-foamed rigid PU foam, freon-free		
Energy label incl. PV	A (1,5kWp, 1,2kWp), C (0,9kWp, 0,6kWp)	B (1,5kWp, 1,2kWp), C (0,9kWp, 0,6kWp)	B (1,5kWp, 1,2kWp), C (0,9kWp, 0,6kWp)		
Electrical connection	Power terminal 230 V, 1\~, max. 2 kW; terminal – PV zone connection 230 V, 1\~, (internal relay)				
Order number	0-525-199	0-525-200	0-525-201		

# **EcoFloor**

Underfloor heating controller

Up to 8 heating zones



Up to 8 heating zones





NORD EcoFloor is an intelligent module for underfloor heating control that delivers maximum comfort and efficiency to every room. It allows precise temperature regulation in up to eight heating zones, with easy system scalability. Integrated with the EcoControl central unit, the entire system can be conveniently managed via the touchscreen panel, mobile app, or remotely through EcoCloud.





#### PRECISE ROOM-BY-ROOM TEMPERATURE CONTROL

EcoFloor allows individual temperature management in each room or heating zone. Every loop can be configured separately based on schedules, outdoor temperature, or comfort preferences. This ensures targeted and efficient heating exactly where it's needed.



#### **UP TO 8 HEATING ZONES PER MODULE**

The base unit can control up to 8 independent heating zones. Larger systems can be easily expanded with additional modules, making them ideal for multi-storey homes or smaller apartment buildings.



#### **FULL INTEGRATION WITH ECOCONTROL**

EcoFloor is fully integrated with the EcoControl central system, allowing convenient heating management from a touchscreen panel, mobile app, or remotely via EcoCloud. All components communicate seamlessly and function as a single smart system.



#### COMPATIBLE WITH DIFFERENT INSTALLATION TYPES

EcoFloor supports both traditional wired and wireless thermostats. This allows flexible adaptation to various building types and makes integration into renovation projects easier.

#### **TECHNICAL DATA**

Power supply [Hz]	230 V AC, 50 Hz
Current consumption [A]	0,04
Maximum current load [A]	5,5
Degree of protection	IP 20
Operating temperature [°C]	0 to 50 ℃
Communication	2× RS485, bidirectional ISM radio communication, Bluetooth 4.2
Radio communication frequency band	ISM 868 MHz (band 865–868 MHz)
Dimensions H × W × D [mm]	330 × 90 × 50
Standards	EN 60730-2-9, EN 60730-1
Order number	E-525-203

# Discover the Intelligent NORD Home

A Unique System for Heating, Photovoltaics and Heat Recovery





Photovoltaic technology uses solar panels to generate electricity from sunlight. This energy powers household consumption, water heating, space heating, and electric vehicle charging. The intelligent system management automatically monitors production, consumption, and storage – for example, in batteries or directly into the EV. It prioritizes the use of self-generated solar power, optimizes vehicle charging based on available power and electricity tariff, and adjusts the operation of other devices (such as the heat pump or boiler) according to current conditions.

The result is cost savings, energy independence, and environmentally friendly operation of the entire household.



#### **EcoSeries**

Highly efficient bifacial solar panels with TopCon technology, capable of capturing light from both sides. The panel's special construction ensures long service life and high resistance to weather conditions.



#### **EcoMaster**

Hybrid three-phase inverter with asymmetric operation – ensures efficient energy flow control between PV system, battery, and grid. Offers up to 15 kW of power and supports off-grid operation.



## **EcoStorage**

High-voltage LiFePO<sub>4</sub> battery storage with over 6,000 cycles – stores excess solar energy for later use.

#### **EcoCharge**

Smart wallbox for electric vehicle charging – allows 100% green energy charging from your own PV system, with dynamic load management and remote control.









#### SEE-THROUGH TECHNOLOGY

The semi-transparent photovoltaic module allows natural light to pass through, creating a bright and open environment while generating solar energy. Its versatile design makes it ideal for residential homes, terraces, carports, and commercial buildings such as canopies or hall roofs.



#### N-TYPE TOPCON TECHNOLOGY FOR LOWER LCOE

With a lower temperature coefficient and better performance in low-light conditions, N-TYPE TOPCon technology increases energy efficiency and reduces the Levelized Cost of Electricity (LCOE), ensuring more affordable solar energy in the long term.



#### **30-YEAR POWER OUTPUT WARRANTY**

Built with durable double-glass technology, ensuring long-lasting performance and reliability for generations.



#### **TIER 1 MANUFACTURER**

The photovoltaic modules are produced under strict quality control on Tier 1 manufacturing lines by DAS-Solar, ensuring premium quality, reliability, and performance.

TECHNICAL DATA	440	445	450
Max. output power Pmax (W)	440	445	450
Max. current Imp (A)	13.23	13.28	13.33
Open-circuit voltage Voc (V)	38.88	39.12	39.36
Module efficiency (%)	22.5	22.8	23.0
Cell type	N Type	N Type	N Type
Number of cells	108ks (6×18)	108ks (6×18)	108ks (6×18)
Dimensions (LxWxH)	1722×1134×30 mm	1722×1134×30 mm	1722×1134×30 mm
Weight [kg]	20.5	20.5	20.5
Frame	Anodized aluminum, black frame	Anodized aluminum, black frame	Anodized aluminum, black frame
Transparent glass	2×1.6 mm, anti-reflective tempered	2×1.6 mm, anti-reflective tempered	2×1.6 mm, anti-reflective tempered
Order number	A-525-2440	A-525-2445	A-525-2450

### **EcoMaster**

Three-phase asymmetric hybrid inverter

Models: EcoMaster 3P - 5.0 | 6.0 | 8.0 | 10.0 | 12.0 | 15.0

NORD HTechnology



More information



and Power Genius modules, it ensures seamless system control and real-time monitoring.

NORD

NORD EcoMaster is a three-phase hybrid inverter that efficiently utilizes solar energy, provides backup power,

and intelligently manages household consumption. With easy installation and full compatibility with EcoControl

NORD







#### **ECO-MODE FUNCTION**

Fully utilize your solar energy surplus by directing it to the heat pump whenever it's available. Maximize efficiency with EcoControl and EcoMaster and start saving today!



#### **SWITCHING TIME TO BACKUP POWER < 10 MS**

NORD EcoMaster features built-in contactors that allow smooth switching between AC OUT and EPS OUT outputs without the need for an external contactor. The EPS output remains constantly energized, ensuring an almost instant transition of power in less than 10 ms – fast enough to keep nearly all devices running without interruption.



TECHNICAL DATA

#### **RELAY CONTACT FOR APPLIANCE CONTROL**

NORD EcoMaster is equipped with a potential-free relay contact to signal energy surplus, enabling automatic switching of household appliances. This smart integration maximizes solar energy use by connecting photovoltaics with heating, water heating, or e-mobility. Relay parameters can be configured directly in the inverter based on time or battery state of charge (SOC).



#### **SUPER 150% ASYMMETRY**

100

Maximize energy efficiency by dynamically reallocating unused AC capacity across phases. With up to 150% asymmetry, a single phase can handle up to 5 kW instead of the standard 3.3 kW – significantly increasing self-consumption of stored or directly used solar power. NORD EcoMaster 3P 12.0 and 3P 15.0 models also support full 100% asymmetry for even greater flexibility.

TECHNICAL DATA	5.0 6.0		8.0 10.0		12.0	15.0	
INPUT (DC) - Maximum recommended PV power [w]	10000	12000	16000	20000	24000	30000	
INPUT (DC) - Maximum DC voltage [V]	1000	1000	1000	1000	1000	1000	
INPUT (DC) - MPPT voltage range [V]	180-950	180-950	180-950	180-950	180-950	180-950	
INPUT (DC) - Start-up operating voltage [V]	200	200	200	200	200	200	
INPUT (AC) - Maximum AC current [A]	16.1	19.3	25.8	32.0	32.0	32.0	
OUTPUT (AC) - Rated AC power [VA]	5000	6000	8000	10000	12000	15000	
OUTPUT (AC) - Maximum alternating current [A]	8.1	9.7	12.9	16.1	19.3	24.1	
Ingress protection rating (according to IEC 60529)	IP65						
Communication interface	Electric meter / CT, external control RS485, Pocket series (optional), DRM, USB						
Order number	G-525-105s	G-525-106s	G-525-108s	G-525-1010s	G-525-1012s	G-525-1015s	

# **EcoStorage**

High-voltage LiFePO<sub>4</sub> Battery

3.6 kWh - 14.4 | 18.0 | 21.6 | 25.2 | 28.8 | 32.4 2.5 kWh - 10.0 | 12.5 | 15.0 | 17.5 | 20.0 | 22.5





A high-voltage LiFePO<sub>4</sub> battery designed for long service life, maximum safety, and accurate state-of-charge prediction. It enables efficient storage of surplus solar energy and increases energy independence. Thanks to its modular design and scalable capacity of up to 33.1 kWh, it offers maximum flexibility for both residential and commercial applications.









#### RELIABLE AND SAFE ENERGY STORAGE

An advanced design with software and hardware redundancy ensures maximum reliability. Tested for electromagnetic compatibility (EMC), aging under high and low temperatures, salt spray resistance, vibration, and other environmental factors to guarantee long-term durability even in demanding conditions.



BATTERY - Weight [kg]

#### **FCO-FRIENDI Y DESIGN**

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NORD batteries are free of toxic heavy metals and corrosive substances, minimizing environmental impact while maintaining high performance and safety.

NORD EcoStore 2.5



#### 10-YEAR RELIABILITY WARRANTY

Thanks to the manufacturer's extensive experience and proven real-world operation, NORD EcoStorage batteries come with an exceptional 10-year warranty - ensuring long-term reliability and user peace of mind.



#### **REMOTE UPDATES**

Easy maintenance through remote access and seamless firmware updates via the EcoMaster unit. This simplifies commissioning and provides ongoing performance optimization without the need for physical intervention.

NORD EcoStore 3.6

TECHNICAL DATA	10.0	12.5	15.0	17.5	20.0	22.5	14.4	18.0	21.6	25.2	28.8	32.4
Total capacity [kWh]	10.2	12.8	15.3	17.9	20.4	23	14.7	18.4	22.1	25.8	29.4	33.1
Usable capacity (90%DOD)[1] [kWh]	9.2	11.5	13.8	16.1	18.4	20.7	13.2	16.5	19.8	23.2	26.4	29.7
Rated voltage [V]	204.8	256	307.2	358.4	409.6	460.8	204.8	256	307.2	358.4	409.6	460.8
Recommended charging / discharging current <sup>[3]</sup> [A]	30	30	30	30	30	30	35	35	35	35	35	35
Recommended charging / discharging current <sup>[2] [3]</sup> [A]	45	45	45	45	45	45	50	50	50	50	50	50
Rated power <sup>[3]</sup> [kW]	6.1	7.6	9.2	10.7	12.2	13.8	7.1	8.9	10.7	12.5	14.3	16.1
Max. power <sup>[3]</sup> [kW]	25	70	70	70	100	100	100	100	100	100	100	100
Communication interface	RS485. CAN											
Dimensions (L×W×H) [mm]	510×365×773	510×365×910	510×365×1048	510×365×1185	510×365×1323	510×365×1460	510×365×783	510×365×920	510×365×1058	510×365×1195	510×365×1333	510×365×1470
Weight [kg]	143	173	203	233	263	293	159	193	227	261	295	329
BATTERY - Battery type	Li-ion (LFP)											
BATTERY - Dimensions	510×365×152	510×365×152	510×365×152	510×365×152	510×365×152	510×365×152	510×365×152	510×365×152	510×365×152	510×365×152	510×365×152	510×365×152
BATTERY - Protection	IP65											

34

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# **EcoCharge**

**Smart EV Charger** 

Models: 3P11 | 3P22







#### 100% SOLAR CHARGING

NORD EcoCharge enables pure solar charging of your electric vehicle, using only surplus energy from your photovoltaic system. Maximize self-sufficiency and reduce reliance on grid electricity for truly sustainable charging.



#### SCHEDULED CHARGING AT LOWER COST

Optimize EV charging by scheduling it during low-tariff periods. Cut electricity expenses and maximize savings by avoiding peak rates.



#### SMART DYNAMIC LOAD MANAGEMENT

NORD EcoCharge automatically adjusts charging power based on the current household consumption. It prevents circuit overload, optimizes energy usage, and ensures stable operation even under peak demand.



#### **EASY INSTALLATION ANYWHERE**

Designed for both indoor and outdoor use – quick and hassle-free installation in any environment.



#### ADVANCED SAFETY PROTECTION

Built-in protection with 30 mA type A and 6 mA DC residual current devices ensures safe and reliable charging, meeting the highest electrical safety standards.



#### **SECURE RFID ACCESS**

The integrated RFID authentication system provides controlled and secure access to the charger, preventing unauthorized use.

TECHNICAL DATA 3P11 3P22

AC INPUT - Phases / Lines	3 fáze / L1 + L2 + L3 + N + PE	3 fáze / L1 + L2 + L3 + N + PE		
AC INPUT - Voltage [V]	400; (320 ~ 476)	400; (320 ~ 476)		
AC INPUT - Frequency [Hz]	50 / 60; ±5	50 / 60; ±5		
AC OUTPUT - Voltage [V]	400; (320 ~ 476)	400; (320 ~ 476)		
AC OUTPUT - Current [A]	16	32		
AC OUTPUT - Power [kW]	11	22		
Wireless module	Wi-Fi 2.4GHz	Wi-Fi 2.4GHz		
RS485 / RFID	yes / yes	yes / yes		
Charging output / protection rating	Type P (charging cable with plug) / Type S (socket-outlet) / IP65			
Order number	0-525-301	0-525-302		

### Discover the Intelligent NORD Home

A Unique System for Heating, Photovoltaics and Heat Recovery





Ventilation with heat recovery ensures a constant supply of fresh air without heat loss, significantly contributing to the household's energy efficiency. When integrated with a smart system, the entire ventilation process is automated and optimized based on real-time conditions inside the house. In homes equipped with a heat pump and photovoltaic system, this forms a highly efficient and eco-friendly solution, where all technologies work together to maximize energy savings and enhance living comfort.



**EcoAir Flow** 

Heat recovery unit with controlled ventilation – ensures a continuous flow of fresh air and efficient heat recovery through a high-performance heat exchanger.



### **EcoAir Flow**

Smart heat recovery unit for a healthy home

Models: EcoAir Flow 450 / EcoAir Flow 600





EcoAir Flow is a modern heat recovery unit designed for efficient air exchange and maximum energy savings. With a high-efficiency heat exchanger and optimized heat transfer surface, the system achieves up to 92% heat recovery efficiency. The built-in ionizer purifies the air, removes odors, and supports a healthy indoor environment - ideal for people with allergies or asthma. The G4 filter captures up to 98% of particles such as dust, pollen, or bacteria, ensuring consistently clean air throughout the home.





#### **INTEGRATED IONIZER**

Neutralizes odors, reduces microbes, and improves air quality with negative ions – ideal for people with allergies or asthma.



#### **EFFICIENT G4 AIR FILTRATION**

The standard G4 filter removes up to 98% of particles down to 10  $\mu m$  – including pollen, dust, spores, and bacteria. Can be upgraded to U15 class filters.



#### **ENERGY-SAVING AND QUIET FANS**

EC motors and foam casing deliver high efficiency with minimal power consumption and noise. Perfect for use in living areas.



#### **EASY INSTALLATION AND MAINTENANCE**

EcoAir Flow is designed for easy installation and straightforward maintenance. Its accessible components and smart construction allow for quick servicing with minimal disruption to household operation.

TECHNICAL DATA	EcoAir Flow 450	EcoAir Flow 600
Power supply	220-240 V~ 50 Hz	220-240 V~ 50 Hz
Rated input power	200 W	340 W
Energy consumption	2,80 kWh / (m²/year)	3,45 kWh / (m²/year)
Power input	0,44 W / (m³/h)	0,57 W / (m³/h)
Max. airflow	450 m³/h	600 m³/h
Acoustic power	50 dB	50 dB
Weight	50 kg	50 kg
Order number	R-525-045	R-525-060





#### Power Genius – smart energy management for every type of installation

Power Genius is an **advanced energy flow management** device that increases the efficiency of using solar power, batteries, and the grid. It enables dynamic appliance control, feed-in optimization, EV charging control, and real-time power flow monitoring.

Power Genius is not tied to other NORD products – it can be easily integrated into any system, from basic self-consumption PV setups to smart homes or complex installations with grid export limitations. **It controls up to 8 outputs** – for example, switching a boiler, heating element, wallbox, pump, or air conditioning unit. Each output can be configured based on surplus power, schedules, priorities, or the current energy consumption of the building.

The system is operated via a clear web interface, accessible from any computer, tablet, or smartphone using a standard web browser.

#### **Power Genius 3000**



Power Genius 3000 enables efficient use of solar energy surplus. It can control up to 7 outputs – e.g. a boiler, pump, or wallbox – based on real-time production, consumption, or set priorities. With its intuitive web interface, it is ideal even for smaller homes or PV systems without other NORD components.



#### **Power Genius PRO**

Power Genius PRO is the next-generation energy controller that builds on the proven foundation of the Power Genius 3000, offering more advanced functionality and control. It features phase-level metering and regulation, 7 switching modes, and up to 8 outputs for greater appliance control. Cloud connectivity allows remote monitoring, system configuration, and detailed energy analytics. It is ready for community energy sharing and trading based on spot market pricing – a true future-ready solution for smart home energy management.

## Power Genius 3000

Smart consumption control for small and medium-sized installations





More information



Power Genius 3000 ensures efficient use of solar energy surplus. It can control up to 7 outputs - such as a boiler, pump, or wallbox - based on real-time production, consumption, or predefined priorities. With its intuitive web interface, it is easy to operate and ideal even for smaller homes or installations without other NORD system components.



- Maximum utilization of photovoltaic energy surplus
- Phase-by-phase measurement and regulation
- Up to 7 outputs with various switching modes
- Supports inverters from SolaX, GoodWe, Sunways, Wattsonic, GROWATT, and energy meters from CHINT and EASTRON

- ( ) Cascading priority setting for output switching
- Suitable for on-grid and off-grid systems
- Output control based on surplus, SOC, temperature, time, push button, ripple control signal, or proportional regulation

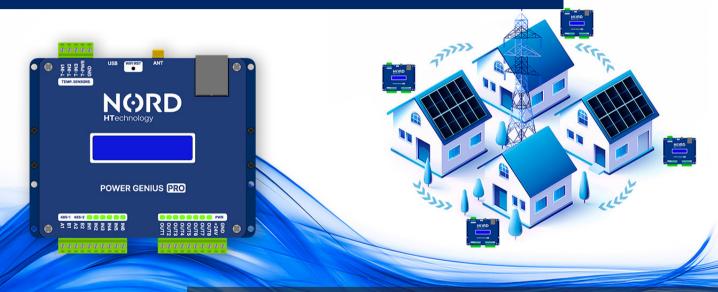
#### **TECHNICAL DATA**

#### **POWER GENIUS 3000**

Inputs	4x digital for connecting potential-free contacts, 2x for DS18B20 temperature sensors
Outputs	7x digital transistor outputs with open collector
Max. load of a single output	100 mA / 24 V
Power supply	24 V DC / 100 mA
Operating temperature range	-20 °C ~ +50 °C
Protection	IP20
Configuration interface	mini USB + PC application for OS Win 7 and higher
Dimensions	85×115×27 mm
Mounting method	DIN rail or panel mount
Order number	E-525-01

### Power Genius PRO

Power and flexibility for more demanding systems



**More information** 



Power Genius PRO offers advanced energy management capabilities for larger installations. It allows you to switch up to 8 outputs with individual settings and integrate additional technologies via Modbus or digital inputs. With its advanced features, network connectivity, and remote access, it is the ideal choice for smart homes, business operations, and demanding hybrid systems.



- ( ) All the features of the 3000 model, enhanced with higher performance and flexibility
- Up to 8 outputs with individual control and advanced switching logic
- ( Inverter and consumption control based on current spot electricity prices
- (•) Ready for electricity sharing within community energy (FW update 2025\*)
- Support for NORD and SolaX inverters, other brands in preparation
- ( ) Suitable for overflow, non-overflow, and off-grid systems
- (•) Remote control, web interface, Ethernet connectivity

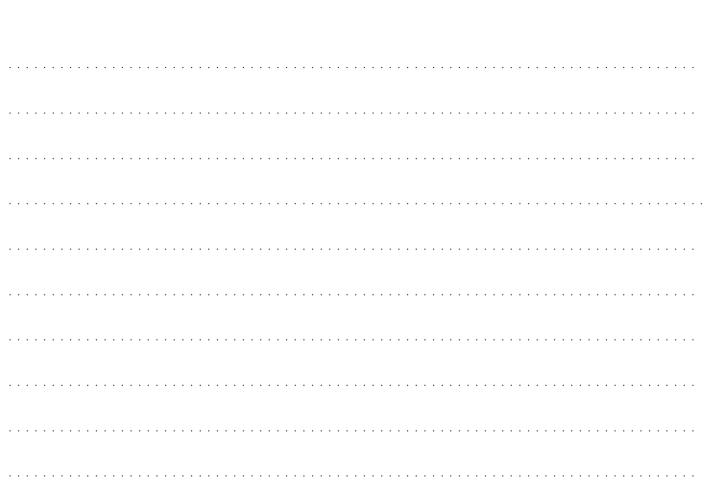
#### **TECHNICAL DATA**

#### **POWER GENIUS PRO**

Inputs	4x digital for connecting potential-free contacts, 2x for DS18B20 temperature sensors
Outputs	7x digital transistor outputs with open collector
Max. load of a single output	100 mA / 24 V
Power supply	24 V DC / 100 mA
Operating temperature range	-20 °C ~ +50 °C
Communication interface	2x RS485, Wifi (2,4 GHz), Ethernet (10/100)
Ingress protection rating	IP20
Configuration interface	mini USB + PC application for OS Win 7 and higher
Dimensions	85×115×27 mm
Mounting method	DIN rail or panel mount
Order number	E-525-02

<sup>\*</sup>The community sharing feature is hardware-supported and will be activated in a planned firmware update in 2025.





The manufacturer reserves the right to make changes. The technical data and images provided are for informational purposes only.



#### We have the solution

Best in PV usage with HEAT PUMP technology

