NORD HTechnology

EcoControl brochure



We have the solution

Best in PV usage with HEAT PUMP technology

Introduction of NORD HT

NORD HT AS is an association of technical companies and renowned prestigious universities from the EU. (NORD HT AS) were launched in 2014 with the support of funding from Norwegian funds.

The main vision of NORD HT AS is to connect the renewable energy, domestic heating, domestic hot water and electromobility sectors for residential and small industrial applications. The intelligent design allows maximum use of available green energy. As a result, savings are maximised and the return on investment is shortened.

NORD HT AS has a logistics base with strategic partners to be close to its customers in terms of supply and support.









Cooperation with NORD worldwide

NORD HT AS has joined an international cluster for the transfer of know-how and further development of its products within European research institutions and global technology companies. The goal of this century is the most advanced renewable energy technologies that are in the interest of our future and the human population.

NO RDIC E DGE

The Norwegian-Polish Foundation cooperates with the From Field To Energy programme.





Foundation Norwegian-Polish





NORD's comprehensive solution for green buildings

NORD HT AS presents a comprehensive solution for the green building concept, based on the basic requirements for photovoltaic system, DHW and heating. Among the basic requirements in the development of the system, emphasis was placed on maximising the use of self-generated energy from the sun, self-sufficiency, unrivalled economic savings and, last but not least, environmental protection. The company motto "We have the solution" applies doubly to system variability. The revolutionary solution can be configured "turnkey" for the smallest apartment units, single-family homes or entire apartment buildings. The most comprehensive set-up offers a complete NORD PV system (panels, hybrid inverter, batteries), a monoblock air-to-water heat pump, EcoBoiler, EV charger and an intelligent control system for management and monitoring.



EcoMode and EcoControl benefits

To ensure that all components from the photovoltaic system to the heating system work together to deliver maximum benefit and that the entire system reaches its full potential, NORD HT AS presents EcoControl, which is necessary for efficient control and distribution of energy in your system. With EcoControl, you can conveniently set up the individual components of the NORD solution and have a complete overview of the entire system.

The key control function of EcoControl is EcoMode, which optimises the use of the solar energy produced. It monitors that no energy is lost and distributes it where it is most needed. This feature allows you to set priorities for individual appliances or create a schedule for efficient energy use. EcoMode increases the set temperatures in the storage tank, heating circuits and DHW based on excess electricity, saving you the electricity you would have to expend at the time of consumption. This allows you to preheat your appliances during the day from the surplus PV.

Home screen with details of the selected room temperature



Individual EcoMode schedule



EcoHeat heat pump operation detail



Individual heating circuit schedule Kitchen with EcoMode switched off



Setting the operation schedule of the EcoHeat heat pump



Individual heating circuit schedule Kitchen with EcoMode on



NORD EcoControl



OPERATION IN ECOMODE POWER SAVING MODE

Thanks to unique features, you can use the surplus photovoltaic energy with the EcoHeat heat pump in the amount you have available. However, the rules for using the surplus also apply to the EcoBoiler, EcoCharge and other appliances. Make the most of the system with EcoControl and EcoMaster and maximise your savings now!

PV READY

Optimise the operation of photovoltaic power plant even further by combining it with EcoHeat heat pumps with EcoControl and make the most of the logic of EcoMode operation.

LCD DISPLAY WITH TOUCH MENU

LCD

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PV Read

The EcoFloor intelligent control system for photovoltaic, heat pump and underfloor heating systems for convenient control and set-up of the entire installation. Customisable menus with the option of custom naming of all heating circuits for better orientation.

DETAILED TRAFFIC HISTORY

Detailed history of operating parameters allows system tuning for maximum efficiency and easy identification of problems and fault conditions.



OPERATING MODE SCHEDULES

Customizable schedules and timers for a wide range of operating modes, along with other optional components such as thermostats or controllers, allow for precise settings according to user preferences and the specifics of the system and its integrated green home devices. Equithermal control of the heat pump is a matter of course.

REMOTE MANAGEMENT AND MONITORING ECOCLOUD



Thanks to the EcoCloud remote management and monitoring module, the entire system can be managed and monitored via a web interface or app on a smartphone. The automatically updated system offers a multitude of user settings, statistics and schedules. EcoCloud is hosted on the most secure Amazon servers.

NORD EcoControl accessories



EXTENSION MODULE "EXTENSION MODULE" Obj.č. E-525-2028

For splitting into 4 or more heating circuits, the "EcoControl extension module" contains an additional main unit and an additional temperature sensors.



UNDERFLOOR HEATING CONTROLLER "EcoFloor"

For comfortable control of underfloor heating, or thermoelectric actuators, with support for up to 8 circuits (up to a maximum of 48 circuits when 6 modules are connected), the "EcoFloor" underfloor heating controller module is used. EcoFloor underfloor heating controller Ord.no. E-525-203



WALL-MOUNTED SENSOR "EcoTherm" The indoor wall temperature sensors are supplied as standard in both a classic wired version (EcoTherm c) and a wireless version (EcoTherm). They are available in two colour designs, white and black.

WALL MOUNTED THERMOSTAT "EcoTherm IF 6"

EcoTherm IF 6 Ord.no. E-525-215

The EcoTherm IF 6 c thermostat is supplied in the standard version with a classic thermostat cable connection.

The EcoTherm IF 6 variant offers connectivity via ISM radio waves and comes

with two batteries and an ISM module.



WALL MOUNTED THERMOSTAT "EcoTherm IF 4" EcoTherm IF 4

There is a wide range of additional temperature sensors and wall
thermostats to choose from. The EcoTherm IF 4 thermostat comes as

The EcoTherm IF 4 c variant is in the classic thermostat cable connection.

The EcoTherm IF 4 variant offers connection via ISM radio waves and is supplied with two batteries and an ISM module.

standard in a wireless version with two batteries.



NORD EcoCloud & EcoDirect - everything at your fingertips from anywhere

For efficient configuration and real-time management of the entire system, NORD provides a web-based system based on the EcoCloud cloud solution and the EcoDirect mobile app for controlling and configuring the EcoControl system via the EcoCloud web module using a BT connection. EcoDirect can also be used to manage EcoFloor modules.

EcoCloud advantages:

- Overview of the entire system
- Real-time diagnostic graphs
- User settings
- Service/installation settings
- Changing the operating mode

(\mathbf{O})	Operating schedules
(\mathbf{O})	Online manufacturer service support
(\mathbf{O})	Online software upgrade
(\mathbf{O})	Reduced service costs (remote acces

Alarms

EcoDirect advantages:

- EcoCloud registration
- For IOS and Android
- Local service settings
- e access to installation) 🜔 Local installation settings
 - Change operating mode







Mobile app NORD EcoDirect

NORD EcoCloud & EcoDirect - easy work for service and maintenance



NORD EcoCloud



A great advantage of the NORD system is the possibility of real-time monitoring of the installation thanks to EcoCloud operation graphs. In the menu of this EcoCloud section, it is possible to select the parameters that we want to display in a given period of time (day/week/month). This allows us to customize the graphs and accurately evaluate up to 33 parameters at a time, and thus perform an accurate diagnosis of the situation. This feature saves you time and money and greatly facilitates the work of diagnosing fault conditions but also serves as a convenient overview tool for the user.



NORD products - photovoltaics



NORD EcoSeries

NORD's designer all-black panels feature an exceptional 25-year product warranty, double glazing, use of the back side to collect even more sunlight, and Topcon's most powerful N-TYPE cells.



NORD EcoMaster

You won't find a more reliable and efficient option than the EcoMaster on the asymmetrical hybrid inverter market. Combine it with EcoControl or Power Genius 3000 for intelligent management and monitoring to ensure maximum yield from your own power plant.



NORD EcoStore

LiFePO₄ battery storage with exceptional lifetime, 10-year warranty and safety meeting the highest standards is another link in the NORD compatible solution.

NORD Power Genius 3000 (incl. Solid State Relay)



The intelligent energy manager is suitable for configurations in houses where only NORD photovoltaic systems are integrated. It sophisticatedly distributes the energy produced in the home so that it is used maximally and efficiently to ensure an even faster payback.

NORD EcoCharge

Intelligent EV/plug-in hybrid charger with the ability to charge with 100% green energy and integration into the NORD system.



NORD products - heating and hot water

NORD Ecoheat (version with two fans)



(single fan version)



The excellent monobloc air-to-water heat pump is appreciated by the installer for its simple installation, but especially by the end user for its exceptional efficiency, low consumption (energy label A+++), low noise and integration into the NORD system. Comfort is ensured by the possibility of adjusting the heating by individual rooms and by the substantial savings in operating costs in conjunction with the EcoMode function (up to 60% if the components are sized appropriately).





The brain of the NORD total solution connects all NORD components from photovoltaics to heating. With the EcoMode function, you maximize the benefits of photovoltaics and increase the efficiency of the entire NORD system. Everything works on the EcoCloud platform for intuitive management and monitoring. Make the most of your own photovoltaics and minimise heating and DHW costs!



Floor regulator EcoFloor heating controller



NORD EcoControl



Designed specifically for operation with photovoltaic energy. The division of the tank into 3 heated layers allows the use of patented heating elements that are capable of heating even with low power outputs. In this way, the boiler allows the DHW to be heated even at lower photovoltaic power outputs, for example at lower illuminance, thus maximising its use, significantly better than a conventional boiler. There is a standard version of the wall-mounted boiler as well as a minimalist Flat design variant with the option of recessing the boiler into the wall.

The EcoFloor module supports thermoelectric drives for 8 heating zones and obtains information about the current temperature in the zones from the touch panels and thermostat and from temperature sensors located in each zone. The module enables significant savings in thermal energy consumption through precise temperature control in individual rooms of the building's heating zones. Configuration and control of the heating zones is done from the panel menu or the mobile app. The module works with the EcoControl base module and EcoTherm temperature sensors.

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