



# NORD EcoStorage

High voltage LiFePO<sub>4</sub> battery



NORD EcoStorage LiFePO<sub>4</sub> battery with high life cycles ▶



## SAFETY

- ⌚ Software and hardware redundancy design
- ⌚ Test: EMC, high and low-temperature aging, salt spray operation an vibration and other environmental



## ENVIRONMENT

- ⌚ No toxic heavy metals
- ⌚ No caustic materials



## LONG-LIFE

Over 6000 cycle life and maximum safety performance with LiFePO<sub>4</sub> technologies.



## WARRANTY 10 YEARS

The long experience of the manufacturer and the proven field usage of NORD power batteries allow exceptional long warranty times.



## REMOTE UPGRADABLE

Easy service maintenance by remote access and upgradability through EcoMaster devices. Make commissioning simpler then ever.



## ACCURATE

- ⌚ Online estimation of high-precision capacity power management
- ⌚ Historical data recording



## REAL-TIME

- ⌚ Real-time accurate SOC prediction
- ⌚ Real-time operational data monitoring



## DEGREE OF PROTECTION

Degree of protection IP55 for indoor and outdoor use.



## POWERFULL APPLICATION

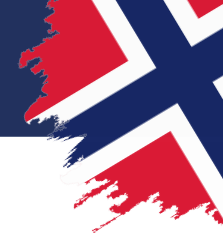
Scalable up to 46 kWh per unit with parallel connection.



## ONE HAND ENGINEERING SOLUTION

NORD EcoMaster and NORD EcoStorage solution come from one engineering house. The highest grade of compatibility insured.





## TECHNICAL DATA

### Configuration options of NORD EcoStorage

NORD EcoStorage	5.8 (M)	6.2	11.5 (M+S)	17.3 (M+S*2)	23.0 (M+S*3)
Nominal Voltage [V]	115.2	204.8	230.4	345.6	460.8
Operating Voltage [V]	100-131	180-232	200-262	300-393	400-524
Battery Type	Li-ion - LiFePO <sub>4</sub>	Li-ion - LiFePO <sub>4</sub>	Li-ion - LiFePO <sub>4</sub>	Li-ion - LiFePO <sub>4</sub>	Li-ion - LiFePO <sub>4</sub>
Total Capacity [kWh]	5.8	6.2	11.5	17.3	23.0
Usable Capacity <sup>[1]</sup> [kWh]	5.1	5.6	10.4	15.6	20.7
For inverter type	1P	3P	3P	3P	3P
Faradic Charge Efficiency [%]	99	99	99	99	99
Battery Roundtrip Efficiency [%]	95	95	95	95	95
Standard Power [kW]	2.8	2.55	5.8	8.7	11.6
Max Power [kW]	4.0	6.2	8.0	12.0	16.0
Recommend Charge / Discharge Current [A]	25	25	25	25	25
Max Charge / Discharge Current [A]	35	30	35	35	35
Short circuit current [A]	760	-	760	760	760
Cycle Life	> 6 000 cycles	> 6 000 cycles	> 6 000 cycles	> 6 000 cycles	> 6 000 cycles
Warranty [Year]	10	10	10	10	10

\*EcoStorage: Master (M) / Slave (S)

### OPERATING INFORMATION

Available Operating Temperature Range [°C]	0 ~ 55	-30 ~ 50	0 ~ 55
Full-load Operating Temperature Range [°C]	5 ~ 48	-20 ~ 55 (3 months); 0 ~ 40 (1 year)	5 ~ 48
Humidity [%]	4-100 (condensing)	4-100 (condensing)	4-100 (condensing)
Altitude [m]	Do 2 000	Do 4000	Do 2 000
Protection	IP55	IP67	IP55

### BASIC INFORMATION

System to Inverter	CAN2.0	RS485 / CAN2.0	CAN2.0
Battery to Battery / BMS	RS485	CAN2.0	RS485
Data Collection Port / FW Update	CAN2.0	CAN2.0	CAN2.0
Master Control Working Mode Indicator	1 LED	1 LED	1 LED
Master Control Capacity Indicator	4 LED (25%, 50%, 75%, 100%)	4 LED (25%, 50%, 75%, 100%)	4 LED (25%, 50%, 75%, 100%)
Battery Module LED	2 LED	-	2 LED
Reset	Button	-	Button
Switch ON / OFF	Button*1 + breaker*1	Button*1 + breaker*1	Button*1 + breaker*1

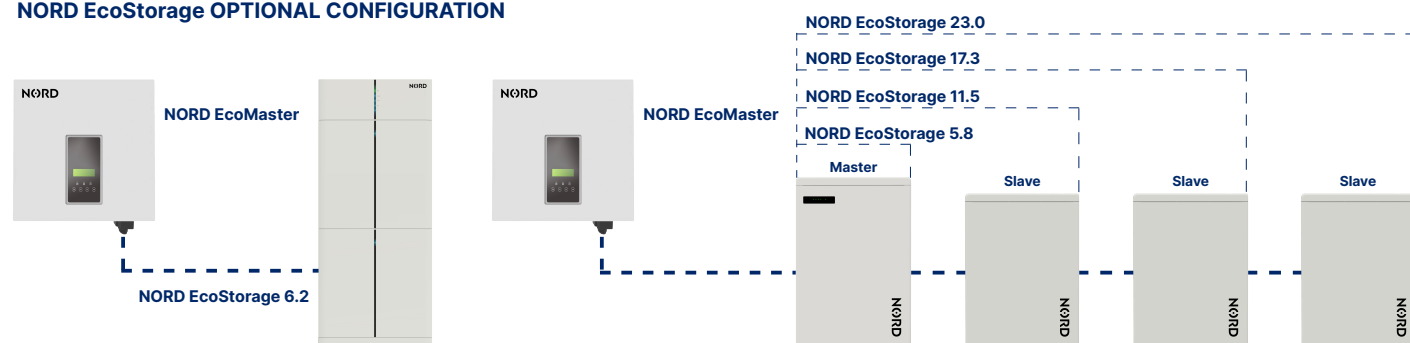
### SAFETY INFORMATION

Safety	CE, RCM, TUV (IEC62619) UL1973, ROHS, REACH	CE, TUV Mark, IEC62619, IEC62040, IEC60529	CE, RCM, TUV (IEC62619) UL1973, ROHS, REACH
UN Number	UN3840	UN3840	UN3840
Hazardous Materials Classification	Class 9	Class 9	Class 9
Transport Testing Requirement	UN38.3	UN38.3	UN38.3

### DIMENSION AND WEIGHT

Dimensions (LxWxH) [mm]	474×193×708	482×148×1155	474×193×708+474×193×647	474×193×708+474×193×647*2	474×193×708+474×193×647*3
Weight [kg]	72.2	76.5	72.2+68.5	72.2+68.5*2	72.2+68.5*3

### NORD EcoStorage OPTIONAL CONFIGURATION



[1] Test conditions: 100% DOD, 0.5C charger & discharger @+25°C

\*The NORD EcoStorage could be scalable up to 4 modules, for a total of 23.0 kWh.

\*System Usable Energy may be variant with different inverter models.