SINGLE PHASE ALL IN ONE ESS

DX Series

DX Energy-3K0L to 8K0L · 3–8 kW · 10.24–40.96 kWh



MODULAR STACKED CABINET

3~8 kW
RATED OUTPUT POWER

10.24~40.96 kWh
BATTERY CAPACITY

97.6 %
MAX EFFICIENCY

<20 ms
SWITCH TIME

IP65
ENCLOSURE RATING

2 MPPT
MPP TRACKERS

HIGHLIGHTS

All-in-One Integration
Inverter, battery charger, UPS and battery pre-wired into one modular system — up to **50 % less** installation time.

Flexible Expansion
2 to 8 battery modules of 5.12 kWh, scaling the system from 10.24 kWh to 40.96 kWh.

High Conversion Efficiency
97.6 % maximum and 97.0 % Euro efficiency; 95.0 % max battery charge / discharge efficiency.

Dual MPP Trackers
Two trackers with an **80–500 V** MPPT window, 550 V max PV voltage and up to 14 A per string.

IP65 Indoor / Outdoor
Compact IP65 enclosure rated for indoor or outdoor installation, withstanding all weather conditions.

$LiFePO_4$ Battery
51.2 V LFP modules of **5.12 kWh**, with a 44.8–57.6 V operating window.

Seamless Backup
UPS transfer in **under 20 ms**, with 110 % / 60 s, 120 % / 30 s and 150 % / 10 s overload capability.

App Monitoring WI-FI OPTIONAL
Real-time monitoring and parameter control via app; RS485 as standard. Low operating noise below 25 dB.

SYSTEM OVERVIEW



MODEL CODE & MATRIX

DX Energy Brand & series		

MODEL	DX Energy-3K0L	DX Energy-3K6L	DX Energy-4K0L	DX Energy-4K6L	DX Energy-5K0L	DX Energy-6K0L	DX Energy-8K0L
GRID & BACK-UP							
Rated output power for on-grid and off-grid	3000 W	3680 W	4000 W	4600 W	5000 W	6000 W	8000 W
Rated output current	13 A	16 A	17.4 A	20 A	21.7 A	26 A	35 A
Max. output current	14.3 A	16 A	19.1 A	20 A	21.7 A	26 A	35 A
PV INPUT							
Max. PV input power	4500 W	5400 W	6000 W	6900 W	7500 W	9000 W	12000 W
No. of string per MPP tracker	1 / 1	1 / 1	1 / 1	1 / 1	1 / 1	1 / 1	1 / 2
Max. input current	14 / 14 A	14 / 14 A	14 / 14 A	14 / 14 A	14 / 14 A	14 / 14 A	14 / 28 A
BATTERY							
Max. charging power	3000 W	3680 W	4000 W	4600 W	5000 W	6000 W	8000 W
Max. charge / discharge current	60 / 60 A	72 / 72 A	80 / 80 A	92 / 92 A	100 / 100 A	120 / 120 A	160 / 160 A
Rated battery voltage	51.2 V	51.2 V	51.2 V	51.2 V	51.2 V	51.2 V	51.2 V

Each power class is ordered with a battery configuration suffix –T2 to –T8; see the battery configuration table on page 3.

COMMON PARAMETERS

PV INPUT

Max. PV voltage	550 V
Start-up voltage	100 V
Rated DC voltage	360 V
MPPT voltage range	80 – 500 V
No. of MPP trackers	2
Max. input current per string	14 A

CONVERSION

Inverter topology	Non-isolated
Max. efficiency	97.60 %
Euro efficiency	97.00 %
Max. battery charge / discharge efficiency	95.00 %

GRID & BACK-UP

Rated output voltage	L / N / PE, 220 V, 230 V
Rated frequency	50 / 60 Hz
THDv	< 3 %
Overload ability	110 %, 60 s / 120 %, 30 s 150 %, 10 s
Switch time	< 20 ms

INVERTER UNIT

Weight	34 kg
Dimensions (W × D × H)	675 × 200 × 415 mm
Rated output power range	3000 – 8000 W
Installation	Floor standing, stacked

BATTERY & SYSTEM PARAMETERS

BATTERY MODULE	
Battery type	Li-ion (LFP)
Rated battery voltage	51.2 V
Battery voltage range	44.8 – 57.6 V
Capacity per module	5.12 kWh
Weight per module	53.6 kg
Dimensions (W × D × H)	675 × 200 × 365 mm
Modules per system	2 – 8

SYSTEM PARAMETERS	
Rated output power	3000 – 8000 W
Operating temperature	0 ~ 50 °C (charging) -15 ~ 50 °C (discharging)
Humidity	0 ~ 95 %
Cooling strategy	Natural
Noise	< 25 dB
Enclosure protection rating	IP65
Communication	RS485 / Optional: WiFi
Operating altitude	< 2000 m

BATTERY CONFIGURATIONS

MODEL SUFFIX	–T2	–T3	–T4	–T5 *	–T6 *	–T7 *	–T8 *
Number of battery	2	3	4	5	6	7	8
Battery capacity	10.24 kWh	15.36 kWh	20.48 kWh	25.6 kWh	30.72 kWh	35.84 kWh	40.96 kWh
Weight	154.4 kg	208 kg	261.6 kg	124 kg 201 kg	178 kg 201 kg	178 kg 255 kg	232 kg 255 kg
Dimension [W×D×H, mm]	675×200 ×1210	675×200 ×1575	675×200 ×1940	675×200×985 675×200×1570	675×200×1350 675×200×1570	675×200×1350 675×200×1935	675×200×1715 675×200×1935

CERTIFICATE

CE / UKCA	EN 61000 IEC 62109-1, IEC 62109-2
Grid	EN 50549-1, VDE-AR-N-4105, CEI 0-21, AS/NZS 4777, G98 & G99, G100