North Sea EL5000

Silicon Carbide Technology
Higher efficiency & Longer lifespan

Battery Charge/Discharge Rate
Up to 100 A, 5 kW

Backup Power Supply
Dedicated EPS Port

Smart Tariff Compatible
Smart energy device integration & intelligent work modes

UK Cloud
Real time visibility
Monitor & configure from anywhere

Input Parameter (PV)

Max. DC Input Power	8 kWp
Starting Voltage	95 V
Max. Input Voltage	600 V
MPPT Voltage Range	80-550 V
Full Load MPPT Voltage Range	350-500 V
Number of MPPT	2
Input String Per MPPT	1
Nominal Input Voltage	360 V
MPPT Max. Input Current	18 A / 18 A
MPPT Max. Short Circuit Current	22 A / 22 A

On-grid Parameter (AC)

Nominal Output Power	5 kW
Max. Output Current	22.7 A
Nominal Grid Voltage	230 V
Max. Input Current from Grid	27.2 A
Grid Voltage Range	184 - 276 V
Frequency Range	45 - 65 Hz
Power factor	~1 (0.8 speed-up 0.8 lag)
THDi(@rated power)	<3%

Backup Terminal (AC)

Nominal Output Power	5 kW
Nominal Voltage	230 V
Nominal Frequency	50 Hz
Nominal Output Current	22.7 A
Output THDu (@Linear Load)	< 2%

Battery

Battery Type	Sodium-ion
Nominal Battery Voltage	45 V
Battery Voltage Range	33 - 59.5 V
Max. Charging Voltage	60 V
Max. Continuous Charging / Discharging Current	100 A

General Data

AC Connection	Single Phase
PV Max. Efficiency	98%
Battery Charging / Discharging Efficiency	95.2%
Standby Power Loss	≤10W
Dimension (W x H x D)	500 x 470 x 180 mm
Weight	23 kg
Noise Emission	< 25 dB
Operating Temperature Range	-25 °C ~ 60 °C
Humidity Range	0 ~ 100%
Cooling Method	Natural Cooling
IP Rating	IP65
Monitoring	LED & APP
Communication	RS485 / CAN / Parallel ports

Certificates & Approvals

CE-LVD	IEC 62109-1, IEC 62109-2, EN 62109-1, EN 62109-2 , IEC 62477-1
CE-EMC	EN61000-6-1, EN61000-6-2, EN61000-6-3, EN61000-6-4, EN 62920
Grid	G99, G100

Protection Mechanisms

- ✓ DC Switch (EN 60497-3)
- ✓ PV Insulation Resistance Detection
- ✓ Residual Current Monitoring
- ✓ Anti-islanding Protection
- ✓ AC Short Circuit Protection
- ✓ Overvoltage and Overload Protection
- ✓ AC Overvoltage Protection: Level 3
- ✓ Battery and PV Overvoltage: Level 2
- ✓ DC Surge Protection: Type 2
- ✓ Lightning Protection
- ✓ Reverse Polarity Protection (PV & Battery)