

Battery energy storage system

SENEC.Home E4 – 3ph 8

Technical data sheet



Valid for	SENEC.Home E4 – 3ph 8
Serial number	E4HT08-XXXXXXXX-XXXX-XX
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Model number:	E4HT08-02
General technical data	
Product type	Hybrid / AC
Dimensions (H × W × D)	1,340 mm × 800 mm × 160 mm
Total weight (incl. 2 battery modules)	177 kg
SENEC.Cloud-capable	Yes
Backup power mode-capable ^[01]	Yes
Communication interfaces ^[02]	End customer: Ethernet Installer: SG ready RS-485 6× Digital Input ModbusTCP
User interfaces ^[02]	End customer: SENECA.App LED indicator Installer: SENECA.Cockpit mein-senec.de
Automatic security updates	Yes
Automatic feature optimisation and expansion	Yes
Control of external PV inverters	Yes
Ingress protection	IP65
Protection class	I
Permissible ambient temperature	Optimal operation: +15 °C to +35 °C Limited operation: -20 °C to +15 °C and +35 °C to +45 °C
Permissible ambient temperature (without battery charging/discharging function)	-20 °C to +55 °C
Relative humidity	4 % to 100 % (condensing)
Installation requirement (indoor)	Upright on surface with sufficient load-bearing capacity and additional wall-mounting
Installation requirement (outdoor)	Upright on surface with sufficient load-bearing capacity and additional wall-mounting Adequate roofing against direct solar radiation and precipitation
Cooling concept	Active cooling (via fan)
AC performance data	
Voltage $U_{AC/backup, nom}$	3× 220 V to 240 V
Frequency $f_{AC/Backup, nom}$	50 Hz
Max. current $I_{AC, rated}$	13.3 A
Max. apparent power $S_{AC, max/rated}$	8.8 / 8.0 kVA
Power factor $\cos \varphi$	0.8 ind to 0.8 kap (adjustable as needed)
Max. active power $P_{AC, max/ rated}$	8 kW
Max. hybrid power $S_{Hybrid, max}$	13.1 kW
Max. backup power $P_{Backup, max}$	8 kW
Battery module	
Battery technology	Lithium iron phosphate (LFP)
Battery topology	High-voltage module, connected in series
Weight per battery module	55 kg
Number of battery modules	2
Max. usable storage capacity $E_{BAT, use}^{[03]}$	9.2 kWh (4.6 kWh per battery module)
Max. charging and discharging power $P_{BAT, max}$	5.12 kW (2.56 kW per battery module)

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Battery module safety

Deep discharge protection	Yes (only during active operation)
Power regulation	Automatic power derating outside of the optimal operating temperatures until safety shutdown

PV performance data ^[05]

MPPT voltage range $U_{PV, MPPT}$	180 V to 950 V
PV starting voltage	200 V
Max. PV input voltage $U_{PV, max}$	1,000 V
Number of MPPT inputs	2 (MPPT 1 and 2)
Max. PV input current $I_{PV, max}$ (MPPT 1 and 2)	26 A (MPPT 1) 16 A (MPPT 2)
Max. PV short-circuit current $I_{SC, PV, max}$ (MPPT 1 and 2)	30 A (MPPT 1) 20 A (MPPT 2)
Inverter topology	Transformerless (non-isolated)

Warranty & monitoring

Warranty	10 years manufacturer's warranty
Monitoring	Free of charge using the SENECA.App for Android/iOS
Remote maintenance	Automatic software updates & diagnosis

Functions

Energy management system	SENEC.PowerPilot
Black start-capable ^[04]	Yes
Backup power function	SENEC.Backup (add-on required) ^[01]
Battery module with integrated heating function	Yes

Directive & standards

CE marking & EU compliance	Low Voltage Directive 2014/35/EU:	EN 62109-1:2010 EN 62109-2:2011 IEC 62477-1:2022	EN IEC 62040-1:2017 IEC 60529:1989/AMD2:2013/ COR1:2019
	EMC Directive 2014/30/EU:	EN IEC 61000-6-1:2016 EN IEC 61000-6-3:2020	
	RoHS Directive 2011/65/EU:	EN IEC 63000:2018	
VDE Application Rule	VDE-AR- E 2510-2:2021 VDE-AR- E 2510-50:2017 VDE-AR-N 4105:2018	VDE FNN Guideline „Connection and operation of energy storage units on the low-voltage network“ (2024)	
Battery safety	IEC 62619:2022 UN 38.3	EN ISO 13849-1:2023	

[01] Optional backup power mode is only available in combination with the SENECA.Backup add-on. Extra costs for additional materials and installation may apply.

[02] Communication is realised via the intelligent interface SENECA.PowerBase (contained in the scope of delivery of the SENECA.Home E4). The use of the communication interfaces depends on the purchase of add-ons such as SENECA.Backup and SENECA.Mobility.

[03] Depends on the charging and discharging conditions, such as the temperature and frequency of use.

[04] Only available for hybrid product type.

The SENECA.Home E4 – 3ph 8 is a smart, connected product. In order to use the product, you need a permanent internet connection and registration at mein-senec.de, including the creation of a SENECA user account.

The corresponding terms and conditions of service apply to the use of the online service www.senec.com/de/unternehmen/download at **Mein-SENECA/SENECA Online-Dienste**.

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