



## HISbatt®-233L

### All-in-One Battery Solution (HISbatt®-233L-92K-C10-G)

DATASHEET

## Highlights

- + Plug-and-play, All-in-One, AC-coupled battery storage solution
- + 233 kWh liquid cooled battery for advanced thermal management and up to 1C operation
- + 92 kVA, SiC based efficient and reactive power capable inverter
- + LFP cells from CATL, assurance of long life and maximum safety
- + AI equipped, energy management system (HISems) with remote monitoring and maintenance service
- + 3-Level robust Battery Management System (BMS) for maximum safety and longevity
- + Fully independent active fire suppression system
- + Outdoor enclosure with IP67 battery modules for any location
- + Installation and relocation friendly, designed for forklift handling
- + Standardised and expandable battery storage system up to 10 MWh

## HISbatt® Use cases

**E-Mobility**

**Agriculture**

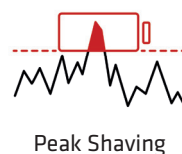
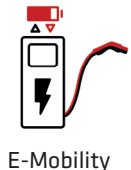
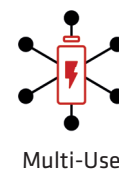
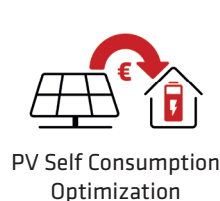
**Industry**

**Supermarkets**

**Real Estate**

**Green Hydrogen**

## HISbatt® Applications



# Technical Data

## HISbatt® All-in-One

### (HISbatt®-233L-92K-C10-G)

Battery Systems	
Battery rack model	HIS-Batt-233-05-C10-L
Battery capacity (Installed)	233 kWh
Battery module model	HIS-MOD-46-1P52S-C10-L
Battery modules per rack	5
Battery cell model	CATL 280 Ah
Battery cells per module	52
Battery cells per rack	260
Cycles @ 90 % DoD usable   70 % EoL	8,000
Battery Management System	HIS-BMS (3 Level Safety)

Inverter	
Battery inverter model	Gridsave 92.0 TL3
Nominal apparent power	92 kVA
Maximum apparent power	92 kVA
Nominal AC current (I)	132.3 A
Nominal AC voltage	400 VAC, 3 Phase
AC power frequency (range)	50 Hz (45 Hz - 65 Hz)
Reactive power / cos phi	0 - 100 % Smax / 0.30 ind. - 0.30 cap. 48 kHz
IGBT switching frequency	48 kHz
Inverter efficiency (Max)	98.7 %
DC voltage range	702 VDC to 936 VDC
Maximum total harmonic distortion	< 3 % at nominal power
Inverter location	Mounted on backside of battery rack

Energy Management System	
Main controller	HISENERGY-Controller
Control software	myHIS-Flow
Applications	Peak Shaving, PV Self Consumption, Time-of-Use, E-Mobility, Multi-Use, etc.
External communication interfaces	Ethernet / Modbus RS 485

Protective Devices & Certifications	
Battery (DC)	Fuse and DC load break switch
DC overvoltage protection	Surge arrester, type I
Ground fault monitoring	Yes
Insulation monitoring	Yes
Safety & fire protection	Smoke detectors, CO sensors, H2 sensors, Smoke detectors, temperature sensors, humidity sensors, water leakage detection, Independent Fire Protection (FK5112)
Cooling principle (Inverter)	Forced Air Cooled (Fans)
Cooling principle (Battery)	Liquid Cooled
Battery operation temperature (Ambient)	-30 °C to 55 °C
Battery storage temperature	-30 °C to 60 °C
BESS Protection class	IP55 (Indoor + Outdoor)
Dimensions (mm)	1350 x 1900 x 2050 (W x D x H)
BESS weight (92 kW/215 kWh)	2,600 kg
Battery storage temperature range (> 1 month)	0 °C to 35 °C (30 % to 50 % SoC)
Safety Certifications	IEC 62619, UL9540A (cell), EC 62477-1:2012
EMC Certificates	IEC 61000-6-2, IEC 61000-6-4
BESS Life (rated conditions)	20 years

