Sentinel

Continuum series · 16 kWh Residential Battery System

UBE · US BUILT ENERGY · PLATFORM 16S1P · $LiFePO_4$ · SPECIFICATION

16.08 kWh	51.2 V	200 A	10.24 kW	32 units
NOMINAL ENERGY	NOMINAL · 48 V CLASS	CONTINUOUS CHARGE & DISCHARGE	CONTINUOUS POWER	PARALLEL ON ONE DC BUS

ELECTRICAL

Chemistry	**$LiFePO_4$ · C4V V-Series**
Cell	**314 Ah · 3.2 V · ×16 · C4V-314AH-72174200**
Configuration	**16S1P (2 × 8S)**
Nominal energy	**16.08 kWh**
Usable energy	**≥ 16.0 kWh @ 25 °C**
Nominal voltage	**51.2 V (48 V class)**
Operating voltage	**40.0 – 58.4 V**
Max. charge voltage	**58.4 V (3.650 V/cell)**
Recommended charge	**56.8 V (3.550 V/cell)**
Discharge cut-off	**43.2 V (2.700 V/cell)**
Continuous current	**200 A charge · 200 A discharge**
Continuous power	**10.24 kW**
Peak discharge	**220 A / 10 s · 250 A / 3 s[2]**
Cycle life	**≥ 8,000[1]**
Expandability	**Up to 32 units in parallel**
Parallel balancing	**Bidirectional DC-DC · ≤ 25 A/unit**

BATTERY MANAGEMENT

BMS	**C4V BMS16S200-RC1**
Low-temp charge	**Inhibited < 0 °C · integral heater**

ENVIRONMENTAL

Rated ambient	**15 – 45 °C**
Charge temperature	**0 – 50 °C[7]**
Discharge temperature	**–20 – 50 °C[7]**
Storage	**–20 – 55 °C · 0 – 35 °C preferred[7] · ≤ 90 % RH · ship at 50 % SoC**
Max. altitude	**4,000 m[7]**

MECHANICAL

Overall (H × W × D)	**1376 × 560 × 218 mm[6] · 1441 mm on feet**
Battery box	**1030 × 560 × 218 mm**
Junction box	**320 × 560 × 218 mm · stacked**
Net weight	**155 kg**
Enclosure	**1.5 mm galvanised steel · powder coat**
Ingress protection	**IP65[3]**
Cooling	**Natural convection · no fans**
Mounting	**Wall bracket · 4 × M10 feet (65 mm)**
Installation	**Indoor / outdoor · wall / floor**
Door finish	**RAL 7024 Graphite Grey · matte metallic**
Box finish	**RAL 7021 Black Grey · satin**
Corrosion	**≥ 960 h neutral salt spray**
Junction box fit-out	**DC disconnect · key switch**

INTERFACES

DC power ports	**4 (+) / 4 (–)**
Cable entry	**12 × Ø50.5 mm · 2 × Ø35 mm**
Inverter comms	**CAN · RS-485 · RS-232**
Pack-to-pack	**LINK IN / OUT · RJ45 daisy chain**
Isolation	**2.5 kVrms · all comms ports**
Earthing	**M5 point on body**

PRODUCT

Model	**TS16-314**
Warranty	**10 years[7]**

Compliance. Under test: UL 1973 · UL 9540A · UL 9540 · UN 38.3[4] · Inverter: separately listed UL 1741 SB · Installation: NFPA 855 · NEC 690.12

1. Cell-level figure: 1C charge / 1C discharge to 70 % retention, room temperature. **2.** Not more than once per five minutes. **3.** Designed and production-verified to IP65; third-party IEC 60529 test pending. **4.** Certifications in progress, not yet listed; no conformity mark is held at the date of this sheet. **5.** DC battery only — contains no inverter and performs no grid-interconnection function. **6.** Includes top cover and gasket. **7.** Provisional — platform data to be confirmed in the governing specification, Rev B. Specifications subject to change. Governing document: C4V-UBE-SPC-001.

Assembled in India · Cells manufactured in Republic of Korea