



ConsusPrime

10030kWh Utility-scale Energy Storage System (ESS)

I Comprehensive Safety

- Uses A+ grade cells with $\geq 8,000$ long-life cycles ^①
- Pack-level aerosol fire suppression combined with container-level water fire protection, delivering active protection and emergency prevention
- IP54 protection and C5-M anti-corrosion, designed for high-temperature, high-humidity, and salt-spray environments

II Grid-Forming Performance

- Autonomous voltage and frequency stabilisation, THDu $< 1.5\%$, delivering superior power quality
- 3 $\times$ overload capability for 10 seconds, confidently handling impact loads
- GW-scale black start capability, enabling full grid recovery within minutes
- Primary frequency response $< 20\text{ms}$ and inertia support $< 100\text{ms}$

III Cluster-Controlled Scalability

- One-cluster-one-management architecture with independent charge/discharge control, zero circulating current, and 3–8% higher energy yield
- Standardised grid-forming PV subarrays and energy storage subarrays, enabling flexible phased expansion

IV Simplified O&M

- Standard 20ft containerised AC station with pre-integrated design for rapid on-site installation
- Modular PCS design enables replacement by a two-person team
- Complete one-stop solution, reducing equipment installation costs by 10%

ConsusPrime-PCS2500kW-MV



Consus-BAT5015kWh-1 $\times$ 2



DATASHEET

ConsusPrime-10030kWh-2500kW-MV-4h

Models	10030kWh-2500kW
DC Side	
Cell type	LFP 3.2 V / 314 Ah
Battery configuration	12 × 1P416S × 2
Nominal capacity	5015 kWh × 2
Nominal voltage range	1123.2 V - 1497.6 V
AC Side	
Rated AC power	2580 kW (107.5 kW × 24)
Max. apparent output power	2838 kVA (118.25 kVA × 24)
PCS nominal AC voltage	3/PE, 690 V
DC component	< 0.5%
THDi	3% (100% load)
Rated grid voltage	10 kV (10 kV ~ 35 kV Optional)
Rated frequency	50 Hz / 60 Hz
Grid frequency range	45 - 55 Hz / 55 - 65 Hz
Power factor	-1~1 (leading - lagging)
Isolation method	Transformerless
General Data of Battery Container	
Dimensions (W × H × D)	6058 × 2896 × 2438 mm
Weight	43000 kg
Operating ambient temperature range	-30 ~ +50°C
Relative humidity	0-100%
Ingress protection	IP 55
Corrosion resistance grade	C5-M
Cooling concept	Intelligent Liquid Cooling
Max. operation altitude	4000 m
Safety / EMC standard	IEC/EN 62619, IEC/EN 61000, IEC 62933
Communication	Ethernet / CAN
Warranty	5 years (Extend to 10 years)
General Data of MV (PCS inside)	
Dimensions (W × H × D)	6058 × 2896 × 2438 mm
Weight	≤ 20000 kg (10 kV)
Operating ambient temperature range	-40 ~ +60°C
Relative humidity	0 - 100%
Ingress protection	IP 54
Corrosion resistance grade	C5-M
Cooling concept	ONAN (transformer)
Max. operation altitude	4000 m (> 2000 m derating)
Safety / EMC standard	IEC 60076, IEC 62271, IEC61439
Warranty	2 years (Extend to 10 years)

① This is provided by the battery cell manufacturer. Defined with standard test condition: the battery is within 70%SOH, charge and discharge at a constant current (0.2C) and an ambient temperature at 25°C±2°C.