



Battery Range Summary

Modular Lithium Battery Solutions with Integrated Energy Management

The **PowerSafe**[®] **iON SC1048P95D** and **SC1548P95D** battery systems combine lithium technology with integrated DC/DC bidirectional converter and intelligent energy management, making them ideal for modern reserve power and cycling applications in telecom, utilities, and industrial backup.

With compatibility for mixed chemistry installations - allowing seamless operation alongside both lead-acid and other lithium models - these systems offer a robust path to capacity expansion and infrastructure upgrade. The integrated Battery Management System (BMS) ensures reliability, remote monitoring, and protection, supporting peak shaving, load shifting, and valley filling for operational and economic efficiency.

Typical Applications

- Telecom reserve power systems
- Energy arbitrage & demand response
- Off-grid power
- High-cycle systems

Features & Benefits

- **Integrated bidirectional DC/DC converter with onboard Battery Management System (BMS) for future-ready power upgrades**
- **Advanced energy management: peak shaving, load shifting, valley filling, and lithium/lead integration**
- **Modular, scalable 19" rack-mount design (3U) for compact setups and future battery expansion**
- **Built-in communication and gyroscopic anti-theft protection**
- **Three selectable modes for optimized performance: Lithium | Smart | Boost**

BMS with integrated DC/DC Bidirectional Converter



Mix different chemistries
Lithium & Lead together



Mix different Lithium-Ion battery products
Brands | Models | Generations
Add batteries at different SOC and/or SOH.



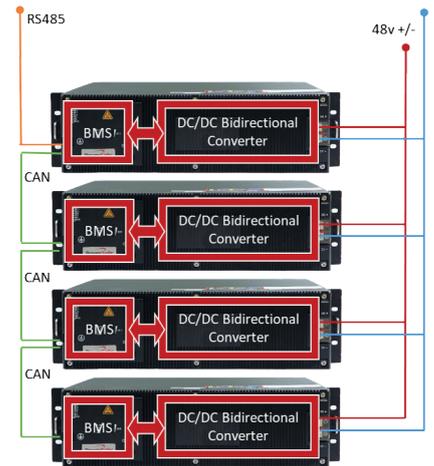
Dynamic load current balancing over available battery modules



Constant voltage for the load regardless of SOC



Elevate output voltage on DC/DC to enable peak shaving and load shifting functionality



General Specifications

ITEM PART NUMBER	SC1048P95D	SC1548P95D
ELECTRICAL		
Nominal Voltage	48V	
Nominal Capacity	100Ah @ 0.5C	150Ah @ 0.5C
Max Power	4800W	
Max Charge Current	100A (1C)	100A (0.67C)
Rated Discharge Current	50A (0.5C)	75A (0.5C)
Max Discharge Current	100A (1C)	100A (0.67C)
Design Life	15 years	
Battery Chemistry	Lithium-ion (LiFePO4)	
Cycle life	4000 cycles @ 0.5C, 25°C, 80% DOD	
MECHANICAL		
Dimensions (W × H × D)	442mm x 130mm x 400mm (3U)	442mm x 130mm x 562mm (3U)
Weight	40kg	61.7kg
Ingress protection level	IP20	
Mounting	19" rack mounting / Battery pack to be supported on shelf or side brackets (not included)	
ENVIRONMENT		
Recommended Operating Temperature	20°C to 30°C	
Recommended Storage Temperature	15°C to 35°C	
Operating Temperature (Charge)	0°C to 55°C	
Operating Temperature (Discharge)	-20°C to 65°C	
Recommended Spacing Between Batteries	Min of 10mm	
Communication	CAN (module) + RS485 (upstream) + 3 dry contacts (SNMP optional)	
Battery Terminal Connection	M6 bolt	
STANDARDS AND CERTIFICATIONS		
Certifications	UN 38.3 / IEC 62619 / EMC (IEC 61000) / RoHS	

Note: Full specifications and performance details are available in the product manuals.



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