

Lithium Iron Phosphate Batteries

When the worlds most experienced inverter company joins forces with one of the most experienced battery companies, the outcome is simply stunning.

Designed to meet the needs of 48V / 120V SP PRO systems and higher DC Voltage systems up to 628V using alternative inverters.

The all new SelectCell range of Lithium Iron Phosphate batteries brings a new level of integration and performance to the battery storage industry.

Working together provides an inverter and battery solution that is engineered in harmony, no more incompatibility issues, and all supported from one point of contact.

Capable of system capacities from 27kWh up to a massive 1MWh with features such as:

- 13.44kWh per battery
- On-Grid or Off-Grid applications
- Prismatic LFP battery cells
- Domestic, commercial or industrial sites
- High energy density with small footprint
- Able to work with a range of inverters
- 48V, (120V) 144V, 432V and 628V
- CAN bus controlled for accurate and safe operation
- Installer friendly installation solution
- Modular and scalable



Ultimate 280 Series



SP PRO
SPMC - 48V
SPLC - 120V



Single or Worker PCC

Manager PCC

Power Control Cabinets (PCC)

To ensure a reliable, safe and convenient installation, each system will be supplied with a choice of Power Control Cabinets (PCCs). These superbly engineered cabinets will not only allow for the easiest possible integration of multiple batteries but also provide the ability to choose the level of redundancy required in the system. Dynamic setpoints shared with the Selectronic SP PRO inverter will allow on the fly adjustments of charge/discharge parameters should the system develop any stress points, all in the name of keeping your loads always powered.

SelectCell Battery Data		
Electrical Characteristics	Ultimate 48V - (individual batteries in parallel)	Ultimate 120 / 144V - (3 batteries in series)
Electrochemical	Lithium Iron Phosphate (LFP)	Lithium Iron Phosphate (LFP)
Cell type	Prismatic	Prismatic
Rated Voltage per battery system	48V	144V
Maximum battery Voltage	52.2V	156.6V
Battery capacity per string	13.4kWh	40.3kWh
Minimum system capacity	26.9kWh	80.6kWh
Maximum system capacity	120kWh	1MWh
Rated continuous charge	6.7kW / 140A	20kW / 140A
Max charge or discharge	8.4kW / 175A	25.3kW / 175A
Peak discharge 1-2mins	9.6kW / 200A	40.3kW / 200A
Communications	Ultimate 48V - (individual batteries in parallel)	Ultimate 120/144V - (3 batteries in series)
Operation without comms to inverter	No	No
Communications type to inverter	CAN bus	CAN bus
Individual string by string, and battery data	Yes - PCC required	Yes - PCC required
Data Communication to SP PRO	Ultimate 48V - (individual batteries in parallel)	Ultimate 120/144V - (3 batteries in series)
Basic data set	No	No
Advanced data set and monitoring	Yes	Yes
Installation	Ultimate 48V - (individual batteries in parallel)	Ultimate 120/144V - (3 batteries in series)
Operating temperature without derating	15°C to 30°C	15°C to 30°C
Maximum operating temperature	-20°C to +55°C	-20°C to +55°C
Charging temperature range	0°C to 45°C	0°C to 45°C
Max battery modules stacked vertically	3	3
Inter-battery power connection	Harting plug	Harting plug
Inter-battery communications connection	RJ45	RJ45
Physical	Ultimate 48V - (individual batteries in parallel)	Ultimate 120/144V - (3 batteries in series)
Dimensions w x d x h (mm) per battery / string	762 x 405 x 448 +/- 2mm / N/A	762 x 405 x 448 +/- 2mm / 762 x 405 x 1344
Weight per battery / string	105kg / N/A	105kg / 315kg
Protection	IP30	IP30
Product warranty	8 years	8 years
Performance warranty	60% of retained capacity after 10yrs or 35.6MWh per battery, whatever comes first	

Power Control Cabinets (PCC)							
	48 - 144V Systems			120 - 144V Systems			
	PCC48-500	PCC48-1000	PCC144 - 300F	PCC144 - 500F	PCC144S500F	PCC144M1000	PCC144M1500
Configuration type	Single		Single	Single	Worker	Manager	Manager
Maximum DC Current rating	500A	1000A	300A	500A	500A	1000A	1500A
System redundancy	No		No		Yes with 2 or more Worker cabinets.		
BMS	Individual battery management system		Individual battery management system		Central battery management		
DC Voltage range	42 - 52.2V		100 - 162V				
Max / inputs (per battery 48V, per string 120 / 48V inputs)	6	9	2	5	4	N/A	N/A
kWh capacity	80kWh	120kWh	80kWh	120 - 200kWh	120 - 160kWh	120 - 640kWh	120 - 960kWh
Max inverter kW capacity	22.5kW	45kW	43kW	72kW	72kW	144kW	216kW
Max cable size for battery inputs	50mm ²		50mm ²			N/A	N/A
Cable entry method	Cable Gland						
Battery Input fusing	No - Battery fusing via additional external enclosure**		200A			N/A	N/A
Max No. of Worker cabinet inputs	N/A		N/A			4	6
Max cable size of Worker inputs	N/A		N/A			185mm ²	
Max No. of inverter outputs	3	6	3		N/A	6	9
Max cable size for inverter outputs	120mm ²		120mm ²		N/A	120mm ²	
Inverter overcurrent protection	500A	1000A	500A			1000A	1500A
Inverter DC isolator	No		No			No	
Battery Isolation device	No		No			Yes	No
Pre-Charge protection	Yes		Yes			N/A	
Dimensions h x w x d	800 x 800 x 300	1000 x 800 x 300	1100 x 800 x 300		800 x 800 x 300	1200 x 800 x 300	1400 x 800 x 300
Weight	58kg	112kg	90kg		75kg	120kg	170kg
IP rating	IP21						
Mounting options	Wall	Floor	Floor		Wall / Floor	Floor	
Warranty	2 years						

* PCC 300A supplied with three spare inputs and can be upgraded to PCC 500A.

** Battery string protection (fusing) is provisioned on inputs of 144V PCC's only. 48V PCC's required separate string protection.

NOTE: SelectCell Ultimate batteries must be connected to a PCC to adequately and safely control the battery charge and discharge. Do not connect SelectCell Ultimate batteries without a PCC.