



Lithium-ion battery

Applications

- Telecommunication Railways & Aviation UPS and IDC Data center
- Renewable Energy Storage System
- DC Systems Backup Applications

Why Lithium-ion battery?

PRM- Series Lithium-ion Battery modules are developed by using advanced LiFePO₄ (Lithium-Iron Phosphate) technology cells and smart integrated BMS/PCM with the benefits of higher reliability, long cycle life, light in weight, compact in size, safety and environment friendly. PRM- Series Lithium-ion Battery can be used for a variety of indoor or outdoor (in closed cabinet) applications. Lithium-ion chemistry demonstrates superior characteristics in UPS applications, this results in high energy density, long life, flexible installation, improved cycle life and a lower TCO.

Management and monitoring system:

The lithium-ion battery integrates a powerful battery management system (BMS), providing cell protection (temp, current, over/under voltage), cell balancing, state of charge and health and alarms/reports.

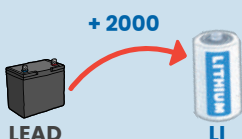
Features

- High Safety Ensured by Integrated Smart BMS/PCM Excellent Cycle and Calendar Life Extendable Capacity with N+1 Configuration
- Wide Working Temperature Range
- Low Total Cost of Ownership (TCO)
- Easy Handling and Installation

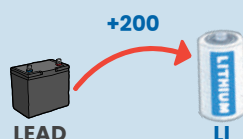
Li-ion vs Lead-Acid Batteries

- Improved Uptime: Fast charging, longer runtimes and opportunity charging to minimize idle time
- Great Value: Eliminates all worries associated with traditional wet batteries
- Low Operating Costs: lower charging costs, no battery watering, Fewer battery replacements and minimal training required
- Enhanced Safety: No risk of encountering battery acid and no harmful gases produced during charging

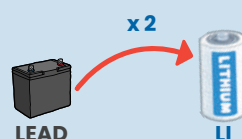
LIFE CYCLES



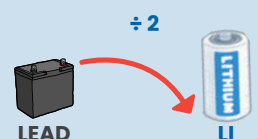
ENERGY DENSITY



OPERATION TEMP



TCO



Specifications

Lithium-ion Battery

TECHNICAL SPECIFICATIONS	PISL-P-12.8V50Ah	PISL-P-12.8V100Ah	PISL-P-25.6V50Ah	PISL-P-25.6V100Ah
ELECTRICAL SPECIFICATIONS				
Nominal Voltage [V]	12.8	12.8	25.6	25.6
Nominal Capacity [Ah]	50	100	50	100
Nominal Energy [Wh]	640.0	1280.0	1280.0	2560.0
Recommended Charging Current [A]	10	20	10	20
Maximum Charge Current [A]	25	50	25	50
Recommended Charging Voltage [V]	14.4	14.4	28.8	28.8
Maximum Charge Voltage [V]	14.6	14.6	29.2	29.2
Recommended Discharge Current [A]	25	50	25	50
Maximum Discharge Current [A]	50	100	50	100
Discharge Cut-off Voltage [V]	11.1±0.2	11.1±0.2	22.4±0.2	22.4±0.2
BATTERY/CELL				
Cycle Life	2000 @80% DOD			
Mass Energy Density [Wh/Kg]	150			
Volumetric Energy Density [Wh/L]	350			
Internal Resistance [mΩ]	0.27-0.40 ⁷			
SAFETY AND STANDARDS				
Overcharge Protection	Yes			
Overdischarge Protection	Yes			
Overcurrent Protection	Yes			
Short Circuit Protection	Yes			
Overtemperature Protection	Yes			
Temperature Sensor	Yes (NTC)			
Adjustable Charge / Discharge Current	Yes (Optional)			
Cell Type	LFP Prismatic			
Safety Standards on Cell	IEC 61960 / 62133-2 / RoHS			
ENVIRONMENTAL CONDITIONS				
Charging Temperature [°C]	0 ~ +60			
Discharge Temperature [°C]	-20 ~ +60			
Storage Temperature [°C]	0 ~ +35			
Humidity (Non-Condensing) [%]	Max. 85%			
Protection Class	IP20-IP65			
Design Life [Year]	>10			
Warranty [Year]	5 Years or 2000 Cycles			
ADDITIONAL INFORMATION				
Battery Connector	SB 50 or as requested			
Serial Connection	No			
Parallel Connection	Optional			
Communication	Optional			
Display	Optional			
DIMENSIONS in mm (approx)				
Width	150	150	300	300
Depth	200	200	200	200
Height	200	250	200	250
Weight [kg]	14.50±0.2	27.75±0.2	27.75±0.2	47.70±0.2
Casing Material	Metal Case or Soft Pack			

*We make customize battery packs i.e. 12V-600V/6Ah-100Ah & more

*Rack mounted solutions are available for better space utilization.

