

# SmartPower 12V50Ah

## SCIFP1250 Lithium-ion battery system

SCIFP1250, a powerful 12V LiFePO<sub>4</sub> battery product, has been designed to provide power backup for remote or outside telecom plants like Access Terminals, Base Transceiver Stations, Base Station Controllers.

### Benefits

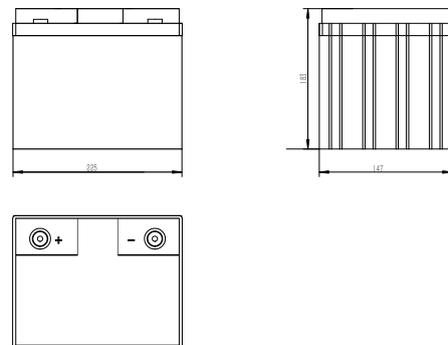
- Increased energy in given space
- Easy installation
- Maintenance-free
- High operational reliability
- Excellent long life time
- Preventive but not premature replacement at end of life

### Standards

- IEC 60950
- IEC 62321
- IEC 62133
- UN38.3
- UL1642
- Passed ISO9001/ISO1001/ISO45001 certification

### Specifications

### Drawing

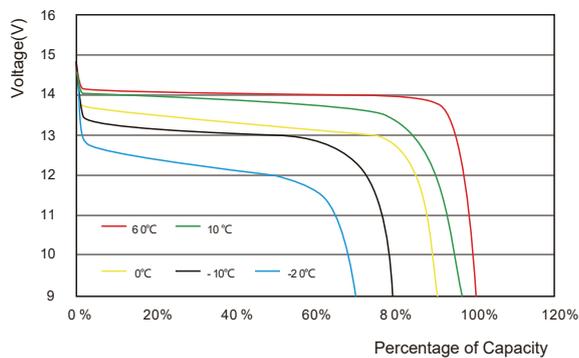


|  |        |                         |
|--|--------|-------------------------|
| <b>Nominal Characteristics</b>         |        | SCIFP1250               |
| Nominal Voltage                        |        | 12V                     |
| Typical Capacity                       |        | 50Ah(0.2C, 25°C)        |
| Typical Energy                         |        | 640 Wh                  |
| Volumetric Energy Density              |        | 114.5Wh/dm <sup>3</sup> |
| Gravimetric Energy Density             |        | 106.7 Wh/kg             |
| Dimensions                             | Width  | 225mm                   |
|  | Height | 183mm                   |
|  | Depth  | 147mm                   |
| Typical Weight                         |        | 7Kg                     |
| <b>Electrical Characteristics</b>      |        |                         |
| Voltage Window                         |        | 10.8~14.4V              |
| Charge Voltage Range                   |        | 14.0~14.4V              |
| Max. Permanent Discharge Current       |        | 50A                     |
| Max. Permanent Charge Current          |        | 50A                     |
| Faradic Charge Efficiency              |        | 99% (+20°C)             |
| Energy Charge Efficiency               |        | 94% (+20°C)             |
| Terminal                               |        | M6                      |
| Additional Features (optional feature) |        | --                      |
| <b>Operation Environment</b>           |        |                         |
| Charge Temperature                     |        | 0°C to +55°C            |
| Discharge Temperature                  |        | -20°C to +60°C          |
| Storage Temperature                    |        | -20°C to +60°C          |
| Protection Class                       |        | IP68                    |

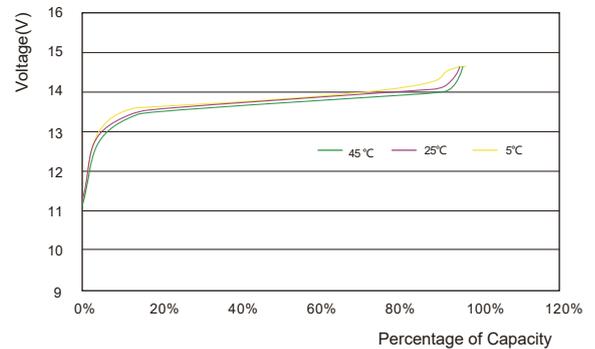
## Discharge Data

| Constant Current Discharge Data(25°C) |           |        |       |       |       |       |
|---------------------------------------|-----------|--------|-------|-------|-------|-------|
| Voltage/V                             | Current/A | 0.1C   | 0.2C  | 0.3C  | 0.4C  | 0.5C  |
|                                       | Time/h    |        |       |       |       |       |
| 12.0                                  |           | 9.475  | 4.858 | 3.254 | 2.420 | 1.925 |
| 11.6                                  |           | 9.927  | 4.948 | 3.309 | 2.453 | 1.960 |
| 11.2                                  |           | 10.003 | 4.996 | 3.344 | 2.494 | 1.990 |
| 10.8                                  |           | 10.101 | 5.044 | 3.359 | 2.510 | 2.000 |

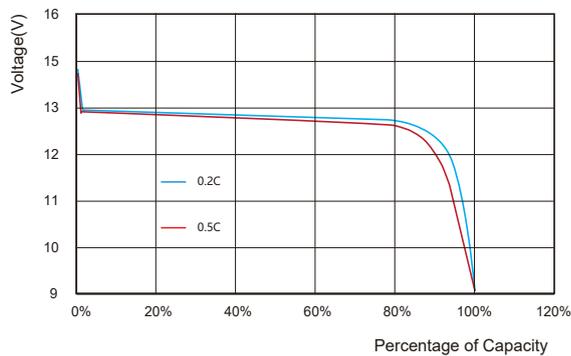
## Performance Curve



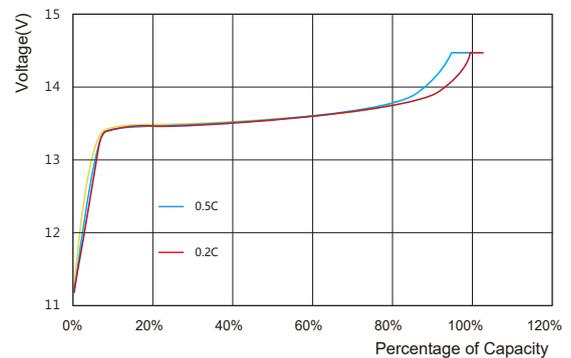
Discharge Curve at Different Temperature



Charge Curve at Different Temperature



Discharge Curve at Different Rate (25°C)



Charge Curve at Different Rate (25°C)

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