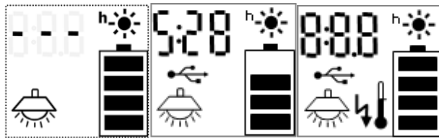


LSX-Litio-Solar Home System



- Long life Lithium (**LiFePO4**) rechargeable battery (**2000 full cycles**)
- Built in solar charger with **Special MPPT**, which allows parallel charging of several LSX by one Solar panel, Load paralleling possible for system capacity increase.
- Rugged PC housing, portable
- **LCD** display with backlight



- LED warning signal
- Touch switch for LCD backlight on and low power activation
- 3pcs load outlet connectors
- 2 pcs 5V USB outlets for charging mobile phone
- **Pay As You Go** functionality built in (can be activated on demand), **integrated Keypad on request** for token application
- One-year **Datalogger** built in

Litio Solar LSX is designed for Solar Home and portable power applications. Available with various storage capacity for operating lamps, small TVs and other standard 12VDC appliances. The built in LCD display allows the user to get detailed information on remaining operation time of the connected loads until the battery is empty, Battery SOC, Charging and Discharging status. The built in charging algorithm with its single cell monitoring ensures optimized operation of the long life LiFePO4 battery under all environmental conditions. The USB charging outlets allow many 5V USB devices to be recharged or operated. Systems with MPPT can be paralleled on Panel/Charging side and/or on Load side without problems for capacity increase or Charging stations. Zimpertec's input power limit hardware/software allows Solar panels to be connected, bigger than nominal power, for faster charging at low radiation or areas with lots of shading (Forest).

| Technical Data: | LSX115 | LSX230 |
|--|--|------------------------------------|
| Battery type: | LIFEPO4 (LFP) | |
| Nominal System Voltage: | 12.8V | |
| Battery capacity: | 11.5Ah | 23.0Ah |
| Battery Energy: | 147.2Wh | 294.4Wh |
| Special MPPT function and Load output: | Solar Panel: Max 25Voc, no power limits, bigger solar panels can be connected for efficient charging at lower sunlight and several LS units can be connected to one panel for charging in parallel. Load output of several LSX can be in parallel too for increasing System Capacity/ grow the system. | |
| Charging current: | 5A | |
| Load current: | 5.7A | |
| BMS | Balancing, single cell monitoring and controlling, battery temperature monitoring | |
| End of Charge Voltage: | 3.55V/cell | |
| Low Voltage Disconnect: | 2.65V/cell | |
| Low Voltage Reconnect: | Recharge battery >10% | |
| Self-consumption: | idle mode: < 800uA / shipping mode < 20uA | |
| Working temperature: | -20 ... +50°C | |
| USB outlet: | 5V/1.5A (short time ca. 4A) | |
| Size: | 240mm*183mm*126mm | |
| Protection: | overload-, short-circuit-, over-temperature-, surge-, reverse polarity protection, PCBA with conformal coating | |
| Display: | LCD + LED | |
| Connector type: | Panel: 1 Barrel (5.5/2.5mm) - Load: 3 Barrel (4.75/1.7mm) – USB: 2*USB-A | |
| | | Panel: 1 set MC4 on request |

All values valid at 25°C