Li-Ion Power Supply Module
WSLIC100 Rev 1.0
➢ Charge current programmable up to 200 mA. Default configuration is 200 mA.

➢ Onboard STNS01 lithium-ion charger IC facilitates auto switchover when external supply is lost. STNS01 charges Li-ion battery & provides 3.1 V supply for running other components when external power supply is available. When power is lost, STNS01 sources power from the Li-ion battery without interruption.

➢ Suitable for applications such as running WiSense router/sensor node from AC mains with Li-ion battery back up.

➢ Includes a thermistor (Murata - NXFT15XH103) used by STNS01 to monitor the temperature of Li-ion battery.

➢ PCB details
  ○ Layers: 2
  ○ Dimensions: 42mm x 42mm
  ○ Mounting holes: 4
  ○ PCB Finish: ENIG

➢ Connectors
  ○ Two pin terminal for Li-ion battery (nominal voltage 3.7 V).
  ○ 2-pin screw terminal for attaching 2 wire thermistor (NXFT15XH103)
  ○ Pin for reporting Li-ion battery voltage to off-board microcontroller (See figure below)
  ○ Micro USB type B receptacle
  ○ Power Jack

➢ Power Input:
  ○ Micro USB type B receptacle (supplies 5 volts to the STNS01)
  ○ Power Jack (Up to 16 Volts). A separate LDO on the board steps down high input voltage to 5 Volts

➢ Power Output:
  ○ 3.1 V / 100 mA generated by an LDO internal to the STNS01