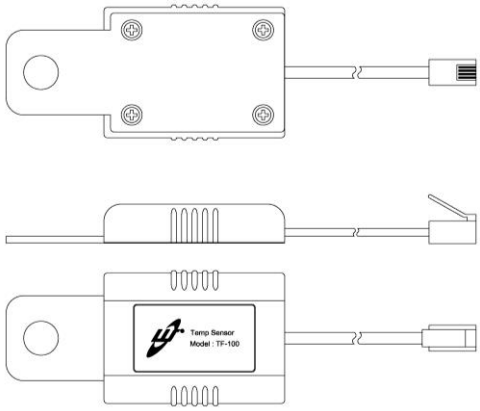
# Charger Temperature Sensor TF-100
# User Manual

## Description

- The temperature sensor measures the temperature of the battery or the environment around the battery and transfers the data to the charger. With deviating temperatures, the charging voltage increases and decreases accordingly.



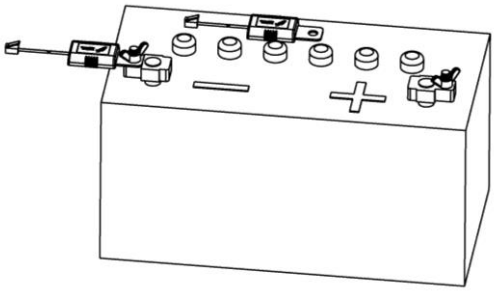

## Installation

- Lay the cables from the batteries to the charger.
- Connect the temperature sensor to the "TEMP" socket of the charger.
- Connect the temperature sensor to the negative pole of the battery, or use a double-sided adhesive tape to attach the sensor to the top of the battery or in the vicinity of the battery

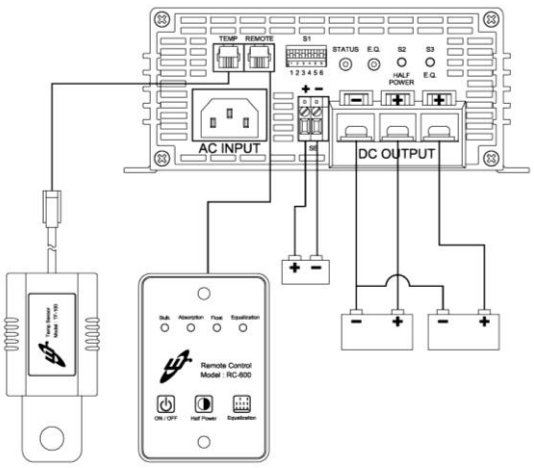
## Note

- The length of TF-100 cable is 5M.

### Installation (Battery)



### Installation (Charger)



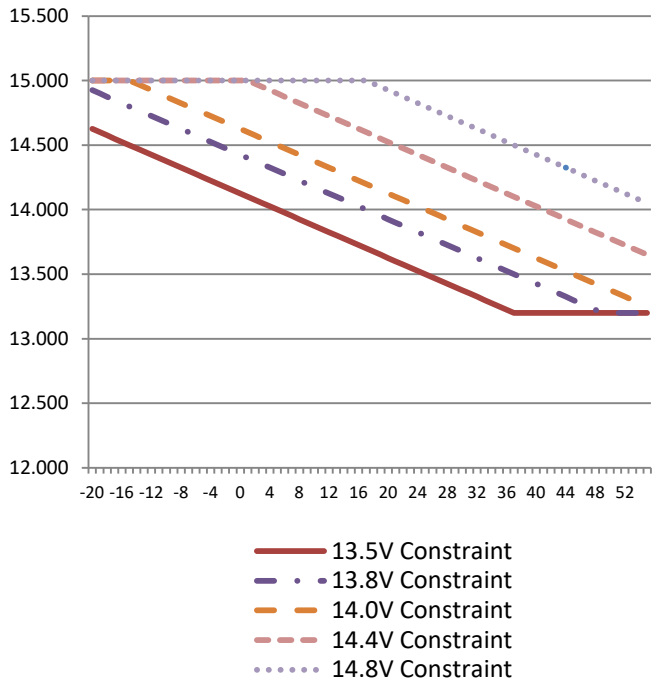
# Function

- The temperature sensor transmits the battery temperature to the charger.
- The charging voltage is adjusted according to the temperature measured.

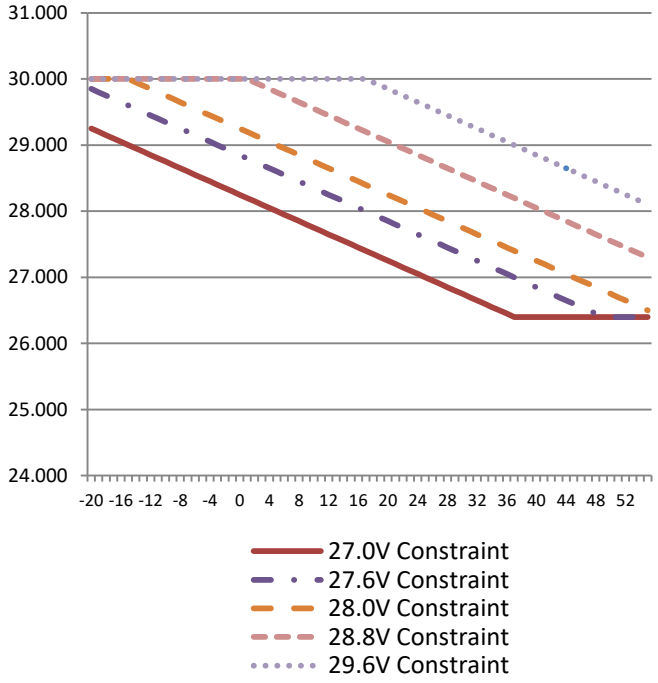
# Units with TF-100

- A temperature sensor can be connected in order to provide the optimum charging functioning. The charging voltages, as can be seen from the following diagrams, vary, depending on the battery temperature.

## Connected to 12V Model




## Connected to 24V Model




# Note

- The temperature sensor is only working in I, Uo and U phases.
- The output voltage is adjusted according to the function -25mV/℃ for WSC-1215/WSC-1215SB and WSC-1230/WSC-1230SB, and -50mV/℃ for WSC-2415. However, the maximum output voltage is 15V/30V, and the minimum is 13.2V/26.4V.
- When the battery temperature detected via TF-100 reaches 55℃, the charger will stop the charging process ("E.Q." LED flashing Red and "STATUS" LED lights Orange), and auto recover when temperature drops to 45℃.
- The output voltage from option 2A charging output for WSC-1215SB and WSC-1230SB is fixed, NOT adjusted according to TF-100.