

HES Series 301 Controller Event Summary

POWER-UP

1. Controller has been powered up from “sleep” state.
2. Controller has been powered up after being disconnected from all power sources; this may also occur after connecting to AC with a very low battery.

ON BATT

1. AC power has been removed from Controller.

ON AC

1. AC power has been connected to the Controller.

BATT LOW

1. Battery capacity is estimated to be less than 10%.

OVER-LOAD

1. Load current has exceeded 15 Amps for more than 15 seconds.
2. Load output has been short-circuited.

FULL BATT

1. Battery capacity is estimated to be 100%, and Controller is in “float” mode.

RECOVERY(DD)

1. Battery is over-discharged, and the open circuit voltage is less than 10.0V. The Controller has entered into “Recovery” mode to attempt to bring the battery back into normal range.

SHUT DOWN

1. The estimated time remaining is less than 20 minutes,”auto-shutdown” started.
2. The battery voltage is less than 11.2V, “auto-shutdown” started.

CHG T-OUT(Charge Timeout)

1. The battery has not reached 100% charge after 12 hours, charge has been terminated.

OVERTEMP(Over Temperature)

1. One or more batteries have exceeded 50 C, charge has been terminated.
2. Controller temperature has exceeded 55 C, charge has been terminated.

BAD BATT(Bad Battery)

1. The Controller has detected an abnormal battery condition, and charge has been terminated.

MAINT DUE(Maintenance Due)

1. The user-preset total amp-hours for the battery have been exceeded.
2. The user-preset total weeks for the battery have been exceeded.

CHG WARN(Charge Warning)

1. The Battery has not been fully charged in 5 days.