



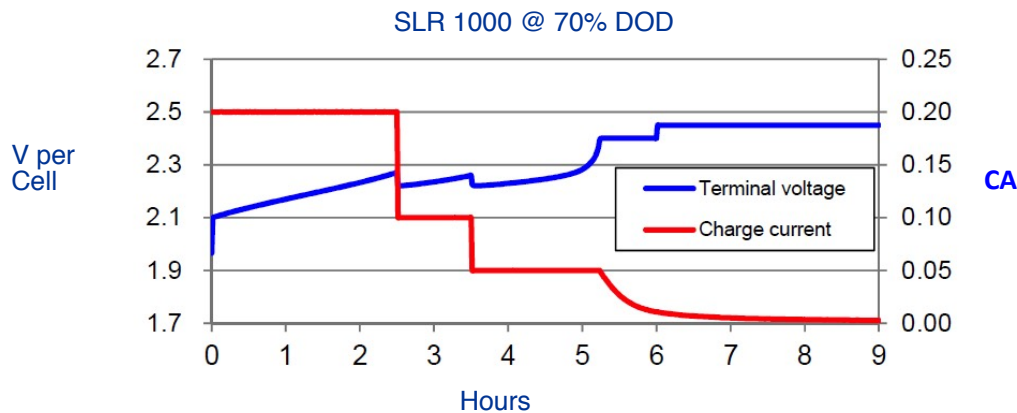
# GS BATTERY (U.S.A.) INC.

Customer Additional Technical Information ATI-20160920

## SLR1000-2 Battery Charging for 48V Nominal battery (24 Cells)

Recommended normal charging is three stage constant current.

- Bulk: 0.2CA (200A) MAX, Constant Current Charge up to **57.6V**
- Absorption: 0.1CA (100A) MAX, Constant Voltage Charge 60-90 mins
- Float Application: Not Applicable
  
- Equalization: 0.025CA (25A) MAX Constant Voltage Charge **67.2V** for 3 hours
  - Recommended equalization charge frequency (whichever comes first):
    - Once per month or,
    - When discharge amount reaches 3.5 - 5 times of rated capacity or
    - Longer if individual cell voltages are monitored



**Maximum DOD:** 70%DOD/30%SOC

**Recommended DOD:** 50%DOD/50%SOC

**Example Charge and Discharge Cycle: Most Chargers have charging current limits on average 120A**

- Discharge condition: DOD70% (0.1CA\*6h)
- Charging condition:
  - Normal charge:
    - 0.1CA for 6h, estimated 90%SOC
  - Equalization charge:
    - 0.025CA for 2.5h after charged (to 104% of rated capacity)

**Efficiency of discharge and charge:**

- Approximately 88% at normal charge condition
- Approximately 83% at equalization charge condition.