



# TECHNICAL ADVISORY

**Advisory Number:** 2008-02  
**Date of Issue:** 10/20/2008  
**Tech Advisory Revision:** New issue  
**Type:** Advisory

**Product Family:** Engine Genset Chargers: All models, all manufacturers

**Background:** Battery temperature compensation is recommended by all battery manufacturers to maximize battery performance and life. Batteries require a higher charging voltage to achieve full charge when cold, and a lower charging voltage to prevent overcharge when very warm. Battery chargers with automatic temperature compensation meet these requirements by automatically adjusting output voltage based on temperature at the location of their temperature sensor.

The location of the temp comp sensor is critical for proper charging. For installations where the charger and battery are always at nearly the same ambient temperature, *local* temp comp (temperature sensor located inside the charger enclosure) is effective and simple. In contrast, *remote* temp comp (temperature sensor located at the battery, remote from the charger) is the required solution when the battery and charger are at different ambient temperatures.

**Problem Description:** Battery blanket heaters are frequently used during winter in cold climates to keep starting batteries from freezing and improve cranking performance. In cold temperatures chargers with *local* temperature compensation increase output voltage because their onboard temperature sensor is cold. This causes the warm battery to be overcharged, causing more rapid water loss (“boiling”) and shortened battery life.

**Solution:** Any site employing battery blankets must use a charger with *remote* temperature compensation. Remote temp comp can be easily added to any SENS NRG charger in the field. Operation is completely automatic, and no adjustments are needed. SENS remote temp comp probe (Part Number 209482) comes with a 50’ lead and is available from SENS Customer Service (service@sens-usa.com, 1-800-742-2326).

Users of chargers without remote temp comp should upgrade to a SENS NRG charger with the remote temp compensation probe. Contact your SENS manufacturer’s rep, or SENS direct (sales@sens-usa.com, 1-866-736-7872).