

# AVIONICS AND PYRO LI-ION BATTERY PERFORMANCE IN RLV TD HEX 01 MISSION

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## Abstract

India's maiden attempt with Re-usable Launch Vehicle, RLV-TD, proved to be a grand success in achieving the specified objectives. The mission played host to several new and home grown technologies as well and the same were also successfully demonstrated. All launch vehicles of ISRO so far used Silver Zinc batteries and for the first time Lithium Ion batteries made at ISAC (ISRO Satellite Centre) used in this vehicle. RLV TD mission requires 3 batteries for avionics and 2 batteries for pyro of identical capacity. The batteries were designed using commercial cells in series and parallel configuration. The paper provides a brief account of the salient features, test results and performance of Avionics and Pyro batteries.

**Keywords:** RLV-TD, Li-Ion Cells, Battery Design, Battery Testing