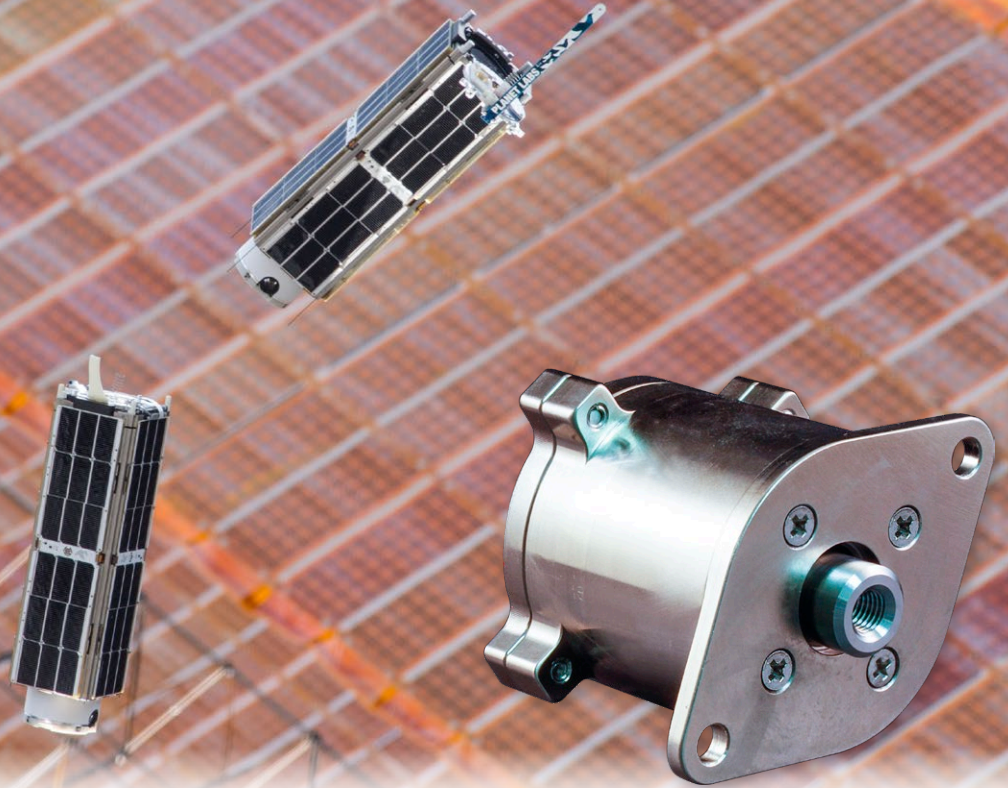




NASA NanoRack CubeSats deployed from the International Space Station. The ISS solar array panels provide the backdrop.



SERIES 06

Pyrotechnic-Free Hold-Down and Release Mechanisms

High-reliability, non-explosive (split-spool) separation nuts and electromechanical release mechanisms for dependable preload stowage and release of deployable space systems

Glenair HDRMs are optimized for foolproof near-simultaneous release reliability with built-in mechanical and electrical redundancy. The planned release of deployable satellites and structures is activated by a pre-determined value of electrical current to a fuse-wire system which causes the wire to break under tension and allows a pre-loaded mechanical bolt to actuate. Glenair's line of low-shock, redundant and non-redundant space mechanisms includes both HDRM devices as well as a family of pin pushers and pin pullers. Customer-defined electrical initiation (with no amperage max limit), as well as housing and mounting configurations are available. Consult factory for specific device TR level and qualification test reports.



Glenair pyrotechnic-free release mechanisms offer near-simultaneous release time, low shock, with relatively low power input requirements. The Glenair family of HDRMs includes separation nuts, HDRMs, pin pushers, and pin pullers which deliver a higher preload carrying capacity in comparison to similar devices.

- **Pyrotechnic-free alternative for single-event release of deployable space systems**
- **Configurable electrical initiation with no (amperage) upper limit**
- **Near-simultaneous release dependent on temperature and power**
- **User-serviceable and refurbishable units**
- **Standard catalog as well as custom designs**
- **Not susceptible to transient and noise (EMI/EMP/ESD/RFI) inputs**
- **Extended temperature ranges: -150°C to +150°C**