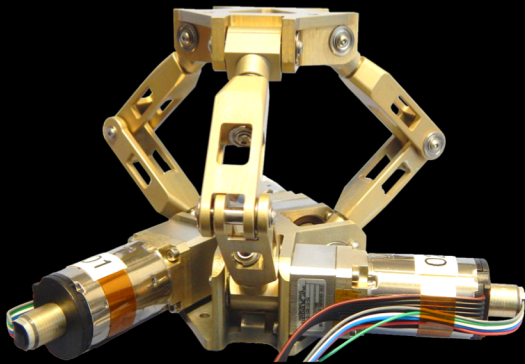




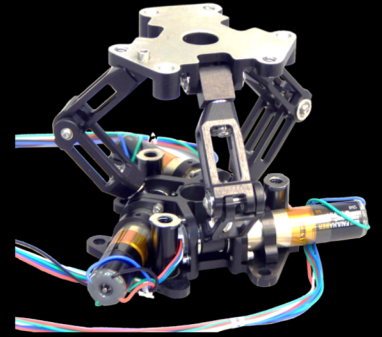
COBRA™ GLOBAL

High-Performance 3DOF Pointing & Positioning for Small Satellites



Why Fly COBRA?

- 🏠 Low SWaP-C
- 🏠 High Precision
- 🏠 High Payload Capacity
- 🏠 Hemispherical Workspace
- 🏠 Continuous Pointing
- 🏠 Flight Qualified



COBRA-UHPX

22 mm BLDC Motor
100:1 Harmonic Drive
12-bit Magnetic Encoder
(491 g w/ launch locks)
165 mm diameter
40 mm (excl. launch locks)
85.5 mm (excl. launch locks)
Full Hemisphere
 $\leq \pm 237$ arc-sec (0.066°)
 ≤ 3 arc-sec (0.00083°)
Up to $180^\circ/s$
Load dependent
None
500 g in 1G
 -40°C to $+85^\circ\text{C}$
 -35°C to $+70^\circ\text{C}$
1X, FD04 Frangibolt (Qual Pending)

Specifications

Actuator
Gearhead
Sensor
Mass
Stowed Footprint
Stowed Height
Deployed Height
Pointing Workspace
Closed-Loop Repeatability
Closed-Loop Resolution
Slew Rates
Power Consumption
Thru Hole Diameter
Payload Capacity
Non-Operating Temperature
Operating Temperature
Launch Lock Option

COBRA-HPX

12 mm Stepper Motor
377:1 Zero Backlash Spur
12-bit Absolute Mag. Encoder
184 g (276 g w/ launch locks)
113 mm diameter
29.2 mm (excl. launch locks)
73.5 mm (excl. launch locks)
Full Hemisphere
 $\leq \pm 234$ arc-sec (0.065°)
 ≤ 276 arc-sec (0.077°)
Up to $30^\circ/s$
2.4 W
10.5 mm
1200 g in zero-G
 -40°C to $+85^\circ\text{C}$
 -35°C to $+70^\circ\text{C}$
3X, FC2 Frangibolts (Qualified)

Flight Units Available Now

Tethers Unlimited, Inc.

11711 N. Creek Pkwy S., D113, Bothell WA 98011

425-486-0100 info@tethers.com www.tethers.com

**Flight
Heritage!**