

# Gold Bee

## World's Smallest Most Powerful Servo Drive for Harsh Environments



The Gold Bee is a tiny, highly intelligent, high-powered servo drive. Weighing only 20grams, the Gold Bee is the ideal servo drive to be "mounted anywhere". For example: Right on the motor, on moving axes or within robotic joints.

Its unparalleled power density is a result of Elmo's proprietary and innovative Fast and Soft Power Switching Technology (FASST), resulting in over 99% efficiency and negligible EMI.



Up to  
**5.5kW**

World's highest power-density servo drive

Up to  
**80A**

Ultra-High Current

Up to  
**200V**

Supply voltage



**UGV**  
Traction & Steering Control



**Airborne**  
Inertial Platform Stabilization, UAV



**Underwater**  
ROV Thruster



**Camera & Laser Pod**  
Tracking



**Missile**  
Guidance Control



Model**	Cont. Current (A)*	Max Voltage (VDC)
R80/80	80	80
R50/100	50	100
25/100	25	100
10/200	10	200
15/100	15	100
10/100	10	100

\*Amplitude sinusoidal \*\*More versions available



**Operates in extreme temperatures**

-40°C to 70°C  
(-40°F to 160°F)



**Operates in altitudes and high pressure**

-400m to 12,000m  
(-1,312 to 39,370 feet)



**Operates under mechanical shock or intensive vibrations**

up to 2000Hz, up to 14grms

\*\* The Gold Bee has successfully passed the HALT test for accelerated temperature and intensive vibration, still runs at -75°C to +110°C and up to 30grms



30mm  
(1.181")

35mm  
(1.378")

Actual Size



**Smallest STO (SIL-3) certified servo**

- IEC 61800-5-2 (SIL3)
- ISO 13840 (Cat3, PLe)



In accordance with all safety requirements as per UL 61800-5-1