

SERVO DRIVE

## *Dedicated for airborne applications*

Elmo has previewed the Platinum Bee single-axis controller at the Defence and Security Equipment International (DSEI) tradeshow in London (UK).



*The Platinum Bee drive ensures improved target identification, enhanced recognition range, and image quality for the imagery components of next generation airborne targeting equipment (Source: Elmo)*

The exhibited servo drive enables targeting units to measure command and feedback signals at a high resolution, ensuring that actual movement of the optical head exactly matches commanded movements from the pilot. With a volume ten times smaller than previous Elmo servo drives and the ability to provide 5.5 kW at 90 A, the Platinum Bee has a high power-to-weight ratio.

The small size of the single-axis drive also means it can be sited much closer to the motor, reducing the need for cabling and cutting electrical noise that could interfere with the signals between the servo drive and the motor. The product features a CANopen interface compliant with the CiA 402 profile specification. It is part of Elmo's harsh environment range of servo drives. The drive offers vibration resistance up to 2000 Hz, a service ceiling above 11,887 km, an operational ambient temperature range of -40 °C to +70 °C, and a mechanical shock resistance of up to 20 g.

The servo drive was developed in partnership with Rafael Defense Systems. Rafael has used several generations of Elmo servo technology in its airborne targeting systems. All together, these

drives collected over two million hours of flight time, flying with 27 air forces and on 25 types of aircraft.

The featherweight Bee series of servo drives weighs just 27 g. It is suitable for DC brush and brushless motors, linear motors, and voice coils. The product features up to 3,3 A continuous current. Its high density allows the drive to deliver a peak of 400 W of power and 200 W of continuous power. The drive supports position, velocity, and current modes. By using the supplier's software tools, users can perform drive setup, configuration, tuning, analysis, and programming. The product operates on DC power and is a PCB-mounted device.

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