

## EO/IR PAYLOADS



Controp's D-STAMP payload is optimised for installation on board small-sized UAVs and equips the Aeronautics Orbiter, Rafael Skylite and Elbit Skylark aircraft.

(Photo: Controp)

### STAMP OF APPROVAL

Elop and IAI Tamam face competition from Controp Precision Technologies, which builds a number of EO/IR products, including the D-STAMP payload designed to equip mini-UAVs and used on the Aeronautics Orbiter, Rafael Skylite and Elbit Skylark. This system's 0.65 kg (1.42 lb) payload contains a high-resolution colour TV camera with x10 zoom. Other products in the STAMP family include U-STAMP which has an uncooled IR sensor with either a continuous optical zoom lens or a fixed field of view. The challenge was to provide the operator with the quality that they would find in a large payload, but all in a compact

low-weight payload which is specifically designed for a small UAV. It's a big challenge to provide the operator with a small payload which is very user-friendly and easy to operate. Also when you see a picture you need to know where it is on the map. It's difficult if you don't have the exact location, so we provide the payloads with navigation systems like GPS', notes Johnny Carni, VP sales and marketing at Controp.

According to Controp, one of the big attractions of its small payloads is the steady image that they return. 'We provide

gyro-stabilisation, just with the same method that is done for large payloads – we provide a very high-quality image. All our payloads have got three or four gimbals. If you want stabilisation looking horizontally but also vertically, you must have at least three gimbals', says Carni. 'The fact that we provide three or four gimbals with all our payloads means that not only do we provide very high stabilisation performance, but also a capability to look vertically downwards and also horizontally.'

Other Controp products include the ESP-600C colour observation payload, which is installed on IAI's Scout and Searcher UAVs. In addition, the company's new compact SHAPO multi-sensor observation payload weighs 10 kg (22 lb) and is equipped with a day camera and FLIR with a continuous zoom lens. Finally, Controp's DSP1 26 kg (57 lb) payload comes equipped with a x36 zoom FLIR and x20 zoom colour TV camera.

Other UAV TI systems are produced by Controp, including the FOX 250, 450 and 720 series, which have x12.5, x22.5 and x36 continuous optical zoom lenses respectively. Carni says that the continuous zoom is particularly important as it enables the operator to adjust the size and field of view according to what they need. This is important when we've got a dynamic environment when the UAV is in motion and the target can be at a fixed point or in motion. It's very important to change the size of the field of view to just the right size to enable the operator to identify the target and to open up to see a wider field of view while your eye is still in contact with the target. If you jump to different fields of view you may lose the target and not find it again. Not only that, but you can also keep your automatic tracker locked on the target so you can zoom in and out while the tracker is locked.' In future, Controp says that the STAMP family will receive a dual sensor package (day and IR camera).