

VERTICAL TAKE-OFF AND LANDING

SRV32

Technical Specification

AND SCOPE OF SUPPLY

A long-endurance electric fixed-wing unmanned aircraft system combining vertical launch and recovery with efficient wing-borne cruise.

3.2 m

WINGSPAN

Up to 2 h

ENDURANCE

80 km/h

CRUISE SPEED

22 kg

MAXIMUM TAKE-OFF MASS

MISSION PERFORMANCE DEPENDS ON CONFIGURATION AND OPERATING CONDITIONS

Aircraft and mission performance

SRV32 VTOL fixed-wing UAS

The SRV32 is an all-electric unmanned aircraft designed for vertical launch and recovery, followed by efficient fixed-wing cruise. It is supplied as an integrated aircraft package with propulsion, flight batteries, mission payload, landing assistance and operator documentation.

Principal specifications

WINGSPAN	3.2 m
MAXIMUM TAKE-OFF MASS	22 kg
CRUISING SPEED	80 km/h
MAXIMUM SPEED	150 km/h
MAXIMUM ALTITUDE	10,000 ft
ENDURANCE	Up to 2 hours
MAXIMUM LANDING WIND	30 kt
DEMONSTRATED IN-FLIGHT WIND	30 kt, gusting 40 kt
INDICATIVE RADIO RANGE	15-30 km, radio dependent

Electric propulsion

Vertical lift

Four MAD electric VTOL motors with 21-inch carbon-fibre propellers.

Forward flight

One MAD electric pusher motor with a 17-inch carbon-fibre propeller.

Energy system

Three 12S 40 Ah LiPo batteries supplied. One flight battery is installed at a time.

PERFORMANCE QUALIFICATION

Endurance is density-altitude dependent and will vary with payload, battery condition, wind, flight profile and reserve policy. Range depends on the selected radio installation and applicable operating approval. The quoted SACAA-approved reference range is 15 km.

Payload and command systems

INTEGRATED DUAL-SENSOR PAYLOAD

EO / IR surveillance

- 540 g gimbal-stabilised dual-sensor camera
- Full HD electro-optical video at 1920 x 1080
- 10x optical zoom and 32x digital zoom
- 640 x 512 thermal imager with 19 mm lens
- Computer-vision object-tracking module

Landing assistance

LIDAR rangefinder

One rangefinder is included to support the aircraft's landing-assistance system.

Aircraft visibility

Lighting equipment

Dual high-intensity strobe lights and navigation lights are installed.

Command and control link

Standard aircraft radio

100 mW 2.4 GHz radio, ICASA approved.

Range and upgrade path

Indicative link range is 15-30 km, depending on radio configuration. Higher-power radio options are available on request.

SYSTEM BOUNDARY

A command-and-control operating environment is not included in the standard aircraft package. Ground infrastructure, control-room systems and extended communications should be scoped for the client's operation.

What is supplied with the SRV32

Standard scope of supply

- One SRV32 VTOL fixed-wing unmanned aircraft system
- Four VTOL motors and one pusher propulsion system
- Three 12S 40 Ah LiPo flight batteries
- Integrated dual-sensor EO / IR gimbal payload
- LIDAR landing-assistance rangefinder
- One complete set of spare propellers
- One dual battery charger for 12S 40 Ah LiPo batteries
- VTOL aircraft user manual
- SACAA-approved Aircraft Maintenance Programme
- Three days of VTOL-specific training for two pilots

Available on request

On-site training

Training delivered at the client's operating location, subject to scope and travel.

Operate, train, transfer

A phased operational handover programme for client capability development.

Technician qualification

Remote Maintenance Technician qualification for nominated technical personnel.

Radio upgrades

Higher-power and extended communications options scoped to the operation.

WARRANTY

Six months on all elements of the supplied system.

NOT INCLUDED

Command-and-control environment and shipping from Centurion, South Africa.

Final configuration, delivery scope, training location and warranty terms are confirmed in the commercial quotation.