

Orion 700

Unmanned Aerial System

Intelligent Scientific / Industrial Remote Sensing

Dynamic Computerized Remote Sensing



On-Board Computer (OBC)

The Orion UAV carries a full Windows PC to control and view the FLIR A65 sensor. However, the OBC supports other high-end sensors that require a computer to operate which expands the unique range of applications of this aircraft.

Orion 700 UAS Standard Payloads

DSLR Camera

The Orion 700 also includes a Nikon D5300 DSLR, 28mm prime lens and GPS puck to georeference each photographic image acquired.

Payload changes from either A65 to the D5300 are straightforward and quick to complete.

The on-board computer of the Orion 700 UAS supports the integration of other sophisticated sensors. Our technical experts provide advice regarding custom sensor integration.



FLIR A65 Sensor

The FLIR A65 included with the Orion 700 UAS, provides the ability to view and record thermal data from an airborne platform. A65 features include: IR resolution 640 x 512 pixels field of view 45° (H) x 37° (V) with 13 mm lens, thermal sensitivity < 0.05°C and accuracy $\pm 5^\circ\text{C}$ or $\pm 5\%$ of reading.



FLIR A65 Sensor

Orion 700 Unmanned Aerial System

Standard Equipment List

Provided as standard equipment for the Orion 700 Unmanned Aerial System.

- Infinite Jib™ Orion UAV
- FLIR A65 thermal sensor
- On-Board PC
- FLIR Tools + Software
- Remote Control Software
- Infinite Jib™ Waypoint ground station
- Infinite Jib™ Data Link ground station
- Flight batteries Qty 4, 11,000 mAh
- T14SG remote control transmitter with charger
- Apple iPad with charger
- Mobius video/still recorder
- Panasonic Toughbook and AC adapter
- LCD field monitor with charger and tripod
- Dual battery charger for flight batteries and ground stations
- Maintenance Kit



Two-tiered training program:

UAV Pilot Ground School Training: three-day program conducted by the Wellington Flight School at the Wellington, Ontario location.

Aircraft Operations Training: two-day program conducted by Infinite Jib™ at the Schomberg, Ontario location.

BASIC TECHNICAL SPECIFICATIONS

ENDURANCE:

Up to 20 minutes with FLIR A65 payload,
18 minutes with Nikon D5300.

SPEED:

Waypoint flights up to 25km/h, Manual flight up to 60km/h

RANGE:

Line of sight

WIND TOLERANCE:

Up to 70km/h gusts without quality degradation

ENVIRONMENTAL TEMPERATURE RANGE:

-10° to 40° C (colder temperatures with training)

ALTITUDE:

Most flights 20-100m AGL (max alt 5800m)

UAV SIZE:

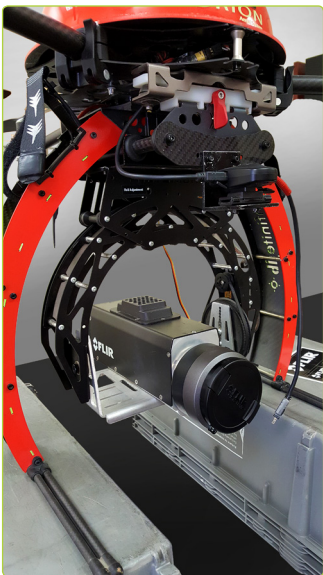
DIMENSIONS H - 54cm, L - 110cm, W - 122cm

WEIGHT: 8.2 Kg (with batteries and FLIR A65, ready to work)

CASE SIZE:

DIMENSIONS H - 60cm, L - 95cm, W - 50cm

WEIGHT: 35kg (with full system)



Custom Integration of a FLIR 300
Gas Detection to the Orion 700 UAV

Implementation support

No Excuses

No Compromise

Round the clock.... "We never close" commitment to producing and supporting the best UAVs in our class.

We understand the importance of a smooth implementation of UAV technology into your company and we want our clients to be successful. To achieve that, we make sure to provide you with our full support from day one. Starting with first contact, we work with you to understand your requirements, provide you with expert advice and recommend the UAV most appropriate for you.

If your requirements demand the accuracy and performance of one of our heavy lift, remote controlled aircraft systems, we will work with you to incorporate any custom features that may be required and determine your delivery and training timeline. As the manufacturer, offering this build to order process provides our client with the advantages to target specific requirements for their UAV investment.

Transport Canada Compliant UAS Design



Transport
Canada

For information about Infinite Jib™ UAS solutions, contact your Infinite Jib™ representative
Call 1-905-859-8857 or email: sales@infinitejib.com

infinite jib™
inc.

