

# PUBLIC SAFETY



Digital Aerolus' **Aertos™** drones are a true 21<sup>st</sup>-century solution to your surveillance, detection and investigation needs. They fly stably and safely where GPS is unreliable.

- Rugged carbon fiber design with internal ducts
- Hovers and flies stably indoors and outdoors
- Hi-resolution instant access video and photo imagery
- Rapid deploy
- Ideal for interior surveillance even when GPS is denied
- Navigate via advanced Folded Geometry flight code (FGC)™
- Smart and behavior-capable with **DABLE™** and **TANGLE™**



**Stable flight indoors:** **Aertos™** drones fly through structures and fly seamlessly from outdoors to indoors. Fly smoothly and hover in one spot even inside structures where GPS or other signals may be blocked. Unlike standard drones, the **Aertos120™** applies Folded Geometry flight Code (FGC)™, inspired by space-flight navigation and our NASA-based roots, to fly and hover *even inside abandoned warehouses, hazardous sites, suspect locations - even if GPS and other signals are denied.*

**Simple to deploy:** **Aertos™** drones quickly deploy just seconds after power up. You do not need to wait minutes to acquire GPS or go through a time-consuming assembly and setup process. Once they power up, our drones can Rapidly begin to carry out desired activities when the first seconds matter.

**See the whole picture:** The **Aertos120™** drone includes a gimbal-mounted high resolution camera that images the entire environment including straight up and down. Users may view images in real time via a mobile phone or tablet. After the drone completes its flight, all images transfer easily for storage, processing and interpretation. **Aertos™** *drones will gather surveillance video images and safely.*

**Safe to use:** **Aertos™** drones fly safely with minimal operating training. Our integrated enclosed-duct design works with control software to help prevent injuries and any damage to obstacles or obstructions the drone might contact. *First-time users can easily and safely launch our drones.*

**Sturdy design:** **Aertos™** use carbon fiber and Kevlar™ for advanced strength-to-weight benefits. Rugged, sturdy ducts protect the blades from touching surfaces, materials and people.

## Who needs **Aertos™** drones?

- Police Departments
- Swat Teams
- Border Patrol
- Fire Departments and Fire Districts
- Military
- Federal Agencies
- Public Safety Organizations
- Private Security



# SPECIFICATIONS



**SIZE:** WxHxD 18" x 18" x 4" , (50cm x 50cm x 10cm) ; **WEIGHT:** 5.6lbs, (2.5kg) (with camera system)

**BATTERY SYSTEM:** LiPo high capacity (spare included) and Universal Mains Charger

**FLIGHT TIME:** Full payload over 11 minutes

**OPERATIONAL TEMPERATURE:** 15F to 105F (-10C to 40C)

**MAXIMUM ALTITUDE:** 8000ft (2400m) ASL

**STANDARD PAYLOAD:** Visual wavelength HD video link (real time view and recorded), plus 12 MP stills, stabilized on gimbal with operator control of pitch from forward to straight up or down (+/- 90°)

**OPERATOR CONTROL:** Conventional joysticks for flight, plus thumbwheel adjustment for camera tilt and button for taking still photos

**COMMUNICATIONS:** ISM bands FCC certified

**LIGHTING:** Colored lights to aid in navigation and indication of status

**ILLUMINATOR:** 2-watt high-brightness (300-lumen) LEDs for videos and stills imaging

**CARRYING:** Protective shipping case and carrying bag included

**OPTIONS:**

Other imaging payloads such as infrared and multispectral cameras

GPS for advanced stability outdoors

Advanced Telemetry Link

Tethering subsystem

Additional batteries

Training

Super Stability with Height Freeze™

LIDAR for advanced ground sensing

The cornerstone of the **Digital Aerolus** technology suite is **Folded Geometry Code** (FGC™), a flight control and operating system built on advanced multi-dimensional geometric flight mathematics developed for space navigation and not previously used in the consumer and commercial drone/UAS industry. We integrate **FGC™** with our **TANGLE™** telemetry and data management system, and our **DABLE™** Behavioral Language and Environment.

These proprietary technologies offer **Digital Aerolus** users the opportunity to **customize performance** and behaviors in all UAVs that deploy our technology. In addition to our own platforms like the **Aertos120™**, **Digital Aerolus** control technologies port to other commercial platforms. Call us for additional information about our drones or technologies, or for help in solving your problems and addressing your needs.

