SmartPlanes
UNMANNED AERIAL SURVEY & MAPPING
EASY TO USE

The Freya system is very easy to use and requires a minimum of training. The fact that the pilot has the option of direct control of the SmartOne aircraft gives the ability to operate from difficult sites and perform precision landings within a few meters.

RUGGED AND ROBUST

The Freya aircraft is rugged and robust and will do the job for many years. The construction with a large cargo bay makes it very versatile and possible to complete survey projects faster and more efficiently.

FAST AND ECONOMICAL WITH HIGH ACCURACY

The system enables production of detailed orthophotos and digital surface models at a fraction of the cost of conventional methods whenever needed.

The aerial imagery collected can be viewed a few minutes after landing with our aerial mapping software which produces georeferenced photo mosaics on-site. The UAS aerial image data can be processed with most post processing software into orthophotos or DSMs with very high accuracy.

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**Freya**

**Aircraft**
- 1.2 m span, shock resistant, high strength skin
- Lexan fuselage, large adaptable cargo bay

**Take-off weight**
- 1.3 kg including battery and camera

**Propulsion**
- Electric motor

**Telemetry**
- 868 MHz, 900 MHz or 2.4 GHz (ISM), range up to 6 km

**Performance**
- Hand launch
- Precision landing in automatic or assisted modes
- Recommended maximum wind 13 m/s, 47 km/h
- Maximum cruise speed 16 m/s, 57 km/h
- Endurance normal mission 50 min – 1h 40 min with reserves

**Coverage**
- 0.1 to 10 km² depending on mission settings

**Weather**
- -20 to +40 °C, snow or light rain

**Flight modes**
- Auto, Assisted

**Cameras**
- 16.2 with large APS-C CMOS sensor
- 16.2 MP NIR compact camera
- Thermal, Multispectral and Live video sensors
- Nadir and oblique view, optional
- Resolution dependent on flying height, 1-20 cm/pixel