

SURVEILLANCE ■



OctoPod

All-in-One Airborne Surveillance



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CONCEPT

The OctoPod is a unique all-in-one belly-mounted airborne surveillance pod jointly developed by Aerodata and its subsidiary Optimare. It enables multi-sensor-based airborne surveillance operations while minimising space consumption and costs for aircraft modification and certification. The OctoPod interfaces to the mission management systems AeroMission® and MEDUSA®.

A wide range of missions
not limited to

Maritime Surveillance

Oil Spill Remote Sensing

Search & Rescue

Land Surveillance

Your solution for multi-sensor-based missions

KEY FEATURES

■ VERSATILE

Operation

- Eight core functionalities based on eight selected sensors
- Supports more than 20 different mission tasks

■ INDEPENDENT

Multi-Platform

- The vertical pod dimension stays within the ground clearances of the most prominent surveillance platforms

■ MODULAR

Configuration

- Individually configurable from subset to full configuration
- Expandable
- Removable
- Low effort for aircraft reconfiguration

■ PRACTICAL

Belly-Mounted

- Low effort for aircraft modification & certification
- Low impact on aircraft cabin

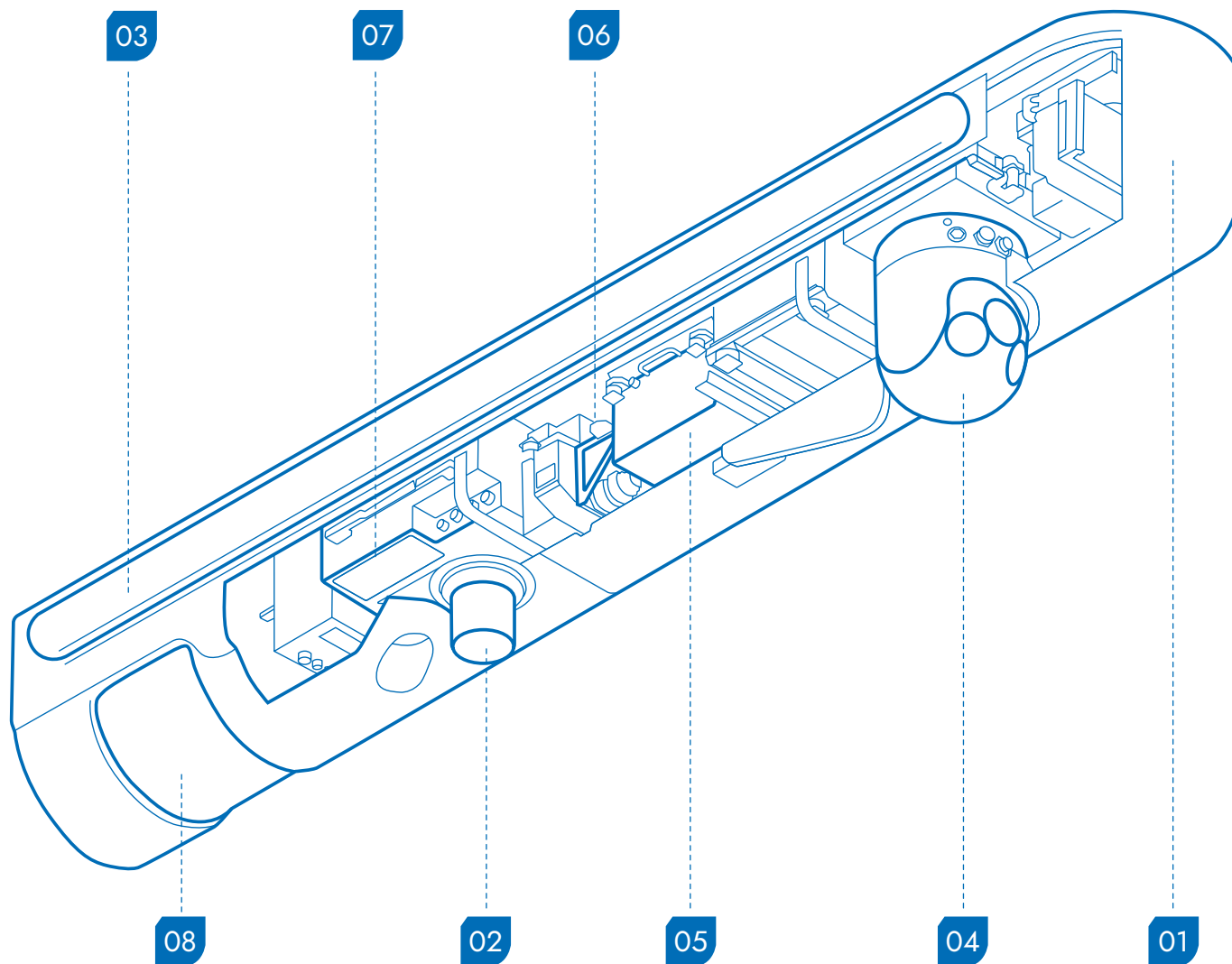
■ COMPLETE

Integration

- Full mission system integration with AeroMission® and MEDUSA®

Associated sensors

for a wide range of surveillance missions



01

Continuous Radar Surveillance

State-of-the-art AESA radar

- Active Electronically Scanned Array technology
- Continuous detection & tracking of
 - moving maritime targets
 - moving land targets (GMTI)
 - airborne moving targets
- Target classification using ISAR
- Search and Rescue beacon detection (SART)

02

Search & Rescue / Tactical Direction Finding

Airborne Radio Direction Finder

- Scanning of Search & Rescue frequencies
- COSPAS-SARSAT
- Broadband capability in VHF/UHF band

03

Wide-Swath Radar Imaging

OPTIMARE SLAR

- Long-range detection of oil spills
- Detection of maritime targets
- Surveillance of fishing activities
- Detection & mapping of speed boat wakes

04

Electro-Optical / Infrared Imaging

15" EO/IR System

- Designed for installation of systems from several suppliers
- Configurable payloads for:
 - optical target identification
 - target tracking
 - evidence gathering

05

Aerial Visible Imaging

OPTIMARE VIS Line Scanner

- Wide-Field-of-View
- Mapping of visual appearance of oil spills
- Aerial RGB composite imaging of water & land surfaces

06

Aerial Infrared/Ultraviolet Imaging

OPTIMARE IR / UV Line Scanner

- Wide-Field-of-View
- Mapping of relative oil spill thickness
- Thermal mapping

07

Day & Night Substance Classification

OPTIMARE Laser Fluorosensor LFS-P

- Reliable day & night discrimination between oil & water
- Classification of crude and refined oils
- Detection of attenuating and fluorescing substances
- Water quality monitoring

08

Scanning Microwave Radiometry

OPTIMARE Microwave Radiometer MWR-P

- Day & night oil spill thickness measurement
- Detection of very thick oil (>50 microns)
- Fire detection
- Monitoring of moisture penetration of dikes

BASIC ENGINEERING DATA

Dimension:

- > L: 4020 mm x W: 720 mm x H: max. 780 mm

Mass

- > max. 400 kg, depending on pod configuration

Altitude:

- > Operation: max. 15.000 ft for operating all sensors
(may be higher in a different configuration, optimum altitude depends on sensor type)

Ferry:

- > max. 41.000 ft

Airspeed:

- > max. 400 kts, may be limited by EO/IR type

Designed to fit onto (among others):

- > King Air B200, 250, 350
- > Dash 8 (Q200, Q300, Q400)
- > Challenger 605
- > Saab 340
- > Twin Otter
- > ERJ140, ERJ145





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