

PUMA AE SYSTEM COMPONENTS

1. System Description

The Puma-AE Air Vehicle can be launched and recovered in minutes without special equipment on unprepared terrain, including water, mud, snow, and dirt. The system employs a self-stabilizing Air Vehicle configuration with stability augmentation avionics, and provides ease of control and steady video imagery. Air and ground components are lightweight and easily configured for transport. The Puma-AE Air Vehicle is battery-powered and has low visual, acoustic, and thermal signatures. The Puma-AE Air Vehicle flies for 120 minutes on rechargeable Lithium Ion (Li-ion) battery pack.

The GCS provides Air Vehicle and payload control and receipt of payload transmission up to 20 km line-of-sight (LOS) from the Air Vehicle. The GCS is powered by rechargeable batteries or AC/DC power sources. The GCS also provides an automated logbook and tracking of system components.

The payload is gimbaled and gyro-stabilized, and includes a five megapixel EO camera, a long-wave infrared (LWIR) camera, and an infrared (IR) illuminator in a single payload. The Puma-AE system is typically operated by a two-person team consisting of a Vehicle Operator (VO) and a Mission Operator (MO).

2. System Components

Component	Qty
Air Vehicle	3
Air Vehicle Battery	3
Gimbaled Payload	3
Ground Control Station (GCS)	1
Remote Video Terminal (RVT)	1
Itronix Go Book Laptop	2
GCS 110/220 AC Adapter	2
GCS DC Adapter	1
Universal Battery Charger (UBC)	1
Kestrel 2000 Wind Meter	1
Field Repair Kit (FRK)	1