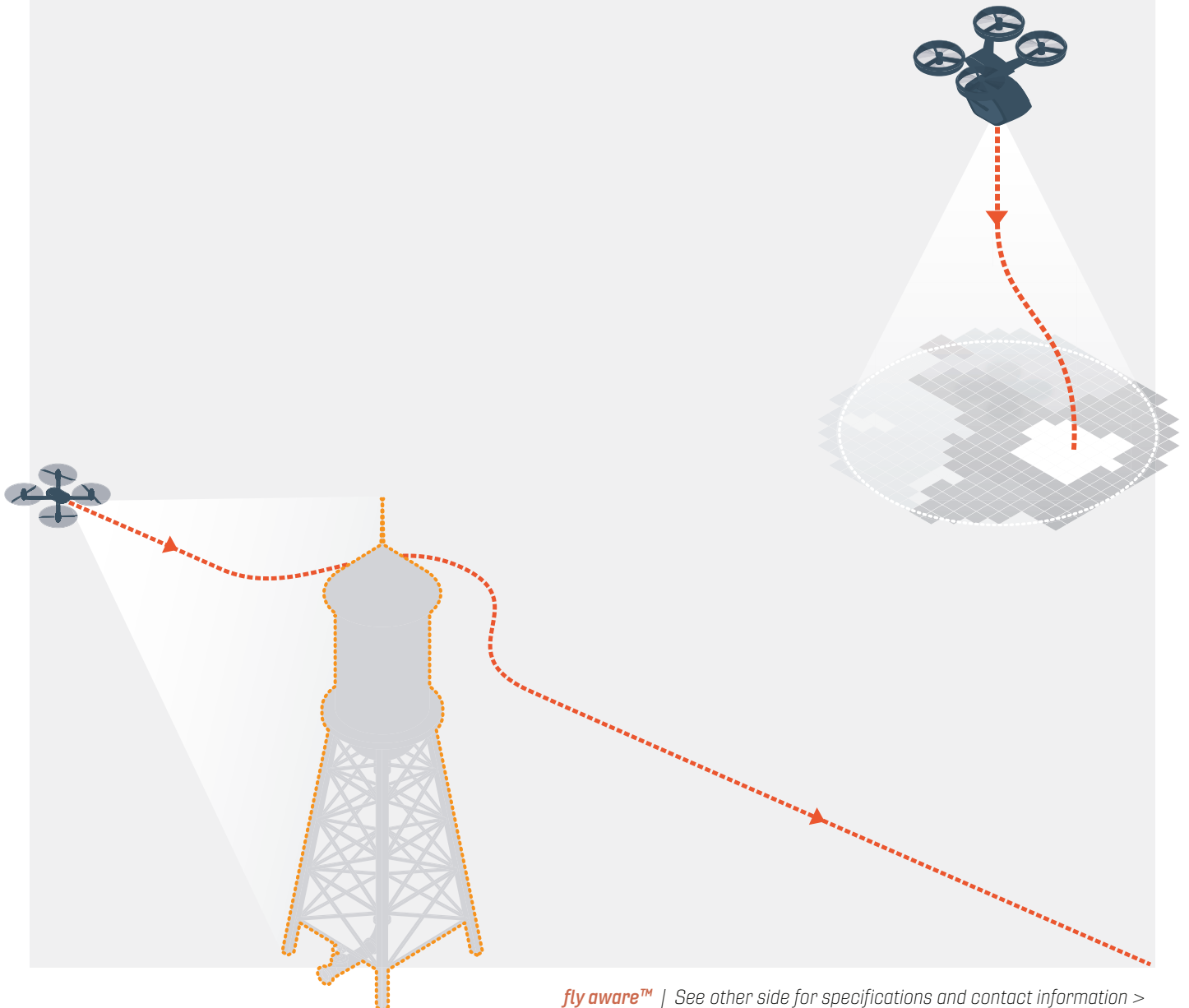
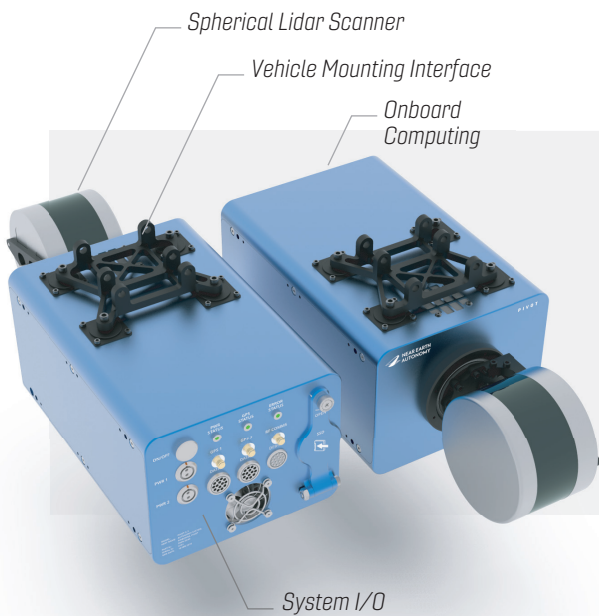


Pivot Autonomy System

Providing safe autonomous flight in unknown environments.

Key functionality includes landing zone evaluation, obstacle detection and avoidance, and estimation of vehicle state. Integrate Pivot with your own vehicles, sensors and algorithms using provided software and electromechanical interface documentation.





Pivot payload components



Pivot shown on example vehicle. We can help integrate the Pivot with other aircraft and systems.



Mission planning software

Pivot Autonomy System key functionality

- ▶ Landing zone evaluation
- ▶ Obstacle detection and avoidance
- ▶ Estimation of vehicle state

Specifications

Physical

Power:	90 W nominal, 15-30 V DC
Power supply:	Aircraft or shore power, hot-swappable
Ports:	Power input (2x), Gigabit Ethernet, Serial, GNSS antenna (2x)
Weight:	3.8 kg (8.4 lb)
Max dimensions:	182 x 165 x 393 mm (7.2 x 6.5 x 15.5 in)

Environmental

Operating temperature:	2° - 32° C (36° - 90° F)
Ambient humidity:	< 85% Relative humidity
Ingress protection:	Not rated

Lidar sensing

Sensing range:	Class 1 laser
Scan angle & width:	360° by ±15° vert, 16 scan lines
Scanning frequency:	300,000 samples/sec (600,000 with dual return)
Scan rate:	5 - 20 Hz lateral, 0 - 2.0 Hz axial
Precision:	0.1° - 0.4° angular, ±3.0 cm (typical)

Storage

On-board storage:	1 TB NVMe solid state drive
Removable storage:	1 TB SATA III SSD

Navigation

Mode:	GPS-aided inertial
IMU:	Tactical grade MEMS, non-ITAR
Initialization:	Quick alignment via dual antenna

Electrical

Power:	100 W peak, 50 W idle; vehicle or shore power
Ports:	18-24 V Power input (2x), Gigabit Ethernet (LEMO), GNSS Antenna (2x SMA), Debug port
Radios	900 MHz — MAVLink command and control 5.0 GHz — Real-time visualization and log access