# DATAVAULT
## TELEMETRY & ACQUISITION

### SATELLITE-BASED TRACKING AND REAL-TIME PROOF OF DELIVERY FOR AERIAL FIREFIGHTERS

#### TELEMETRY DATA CAPTURE
- Time and location of lift and landing
- GPS measured drop, start and end
  (subject to equipment)
- Drop quantity and fill via bucket load cell monitoring
- Optional in-bucket fill and empty detection
- Optional additional inputs:
  - Rotor brake
  - LIDAR altimeter
- High frequency internal logging to SD Card
- Customizable logging to USB flashdrive

#### REAL TIME TRANSMISSION AND TRACKING
- Internal Iridium satellite modem
  (units without Iridium modem optional)
- Message delivery via third party systems
- Configurable time based tracking

#### DATA DISPLAY AND MANAGEMENT
- Full integration with v2track
- Optional management software provides:
  - Mission visualization and reporting
  - Monthly Flight Operations Reports summarized by incident, aircraft or fleet
  - Cloud based archive and storage

#### MESSAGE INTERFACE (OPTIONAL)
- Enables two way transmission of pre-formatted text messages
- Fire line marking
- Distress call and cancel
- Additional data entry for:
  - Pilot Name/ID
  - Task type/incident
  - Enables time or distance based tracking reports, at configurable intervals

New For 2024 — Integration with v2track

MESSAGE INTERFACE

MILSPEC USB FLASHDRIVE HOUSING

MISSION PLAYBACK & MANAGEMENT SOFTWARE

DATAVAULT PLUS

# EVERY DROP COUNTS. COUNT EVERY DROP.

Building on more than 20 years of experience in the aerial firefighting industry, the DataVault is a uniquely open platform which enables operators to easily comply with the increasingly stringent reporting needs of authorities worldwide.

Available to order now, DataVault is a high performance telemetry and data acquisition system tailored to meet the needs of the aerial fire-fighting community.

DataVault is a truly open "plug-and-play" device. Although optimized for use with the FRDS GEN II, our Remote I/O kit enables compatibility with older FRDS GEN I units and third-party gate controllers. For third party systems, the DataVault can either analyze the gate controller's serial bus, or monitor analog and digital sensors directly to capture proof of delivery data according to both NAFC and USFS requirements.

A built-in module is used to send gate and aircraft data in near real time via the Iridium satellite constellation for display to an operator or fire-fighting authority.

With its external GPS and Iridium dual function antenna, DataVault provides advanced tracking services which relay position data via satellite to v2track on a configurable time or distance basis. The optional Message Interface, mounted on the aircraft's instrument panel, allows the pilot to easily adjust the tracking transmission interval parameter to a specific time or geo-fence to optimize transmission bandwidth when operating in limited geographical territory. The Message Interface also supports transmission of geo-tagged waypoint markers such as "persons in danger" or "property at risk".

DataVault has both fixed and removable data storage, which when combined with its internal motion sensors, enables deep post-mission analysis to assess delivery efficiency, aircraft utilization and pilot performance. Internal memory constantly records more than 40 parameters, including geo-tags, at intervals as short as 0.1s and has capacity for more than 1,000 flight hours. Information can also be collected on a USB stick and uploaded to an internet accessible database for mission replay, plotting, reporting and sharing data with authorized third parties.

Configured via a comprehensive set of PC based DataVault tools, the PRO model delivers the ability to add user digital or analog inputs which can be easily scaled to actual units of measure, recorded and transmitted in real time to a base station via third-party products.

Expansion boards for the DataVault include the ability to drive electric motors, on/off valves and proportional valves to enable control of other equipment on the aircraft.

## SEE DEALER FOR PRICING

**www.v2track.com**
**sales@v2track.com**

## AVAILABLE OPTIONS

**Enclosure LCD & Keypad** provides a direct method for configuring & interacting with the DataVault system, and is included on the PLUS and PRO models. The standard model requires a Message Interface.

**Message Interface** allows pilots to communicate with ground operations by sending and receiving text-based communications via Iridium network, no SIM card required.

**Milspec USB Flashdrive Housing** can be mounted anywhere that is convenient for pilot access. This provides access to the logging USB drive for proof of delivery data.

**AUX I/O Connectors** provide additional sensor inputs and high-current outputs for greatly expanded capability.

**H-Bridge Drive** output can connect to and control high voltage stepper motors, on/off and proportional valves, etc.

**Satellite Modem** enables real-time data sent from nearly anywhere in the world via Iridium Satellite, no cellular network required.

**Custom Firmware and Sensors** will unlock DataVault's flexible architecture to provide an excellent solution for your unique requirements.