

COMPLETE SYSTEM FOR HIGH-RESOLUTION UAV/ROV-BASED MAGNETOMETRY & COMPENSATION

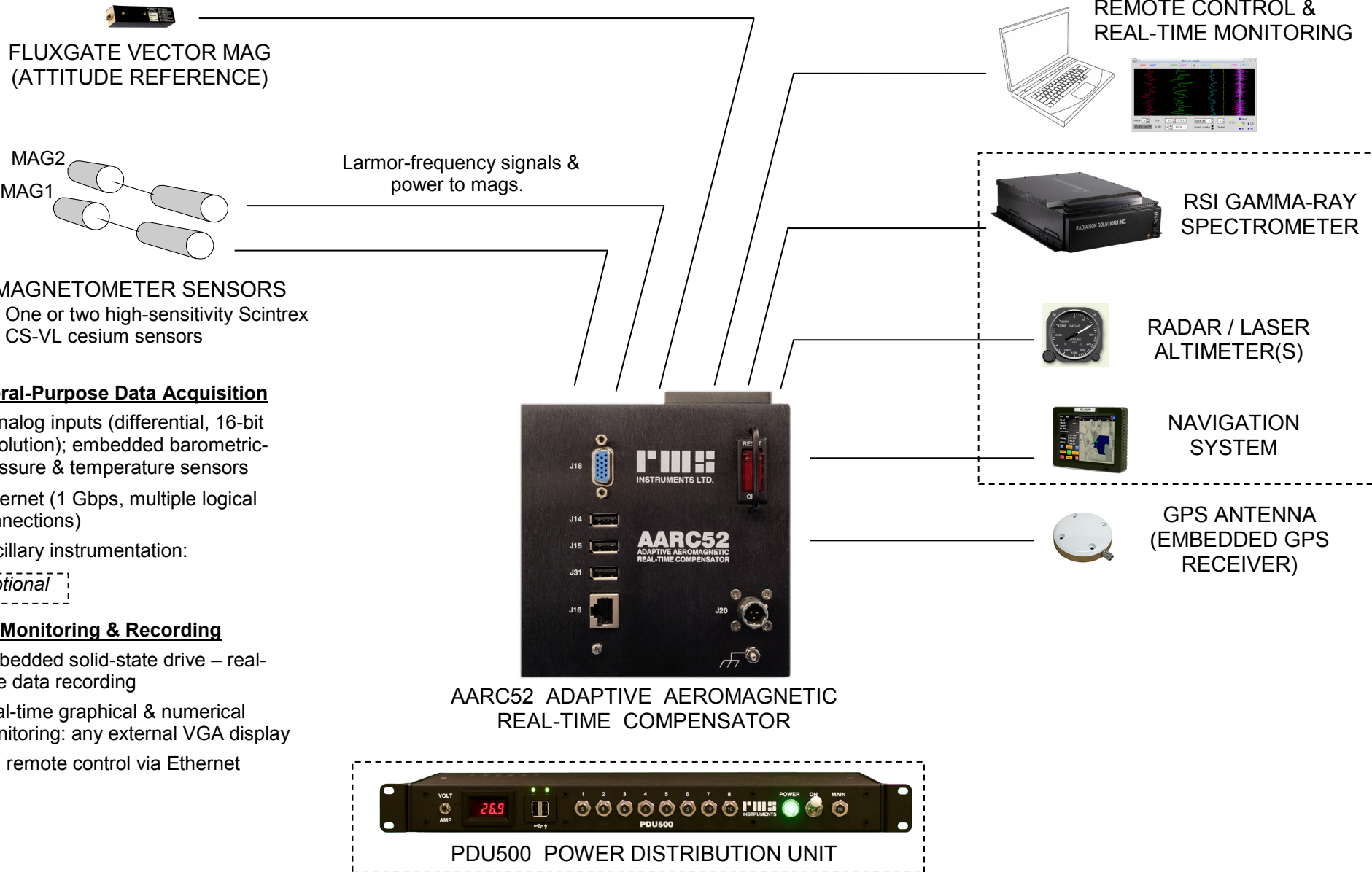
State-of-the-art system for magnetometry based on Unmanned Aerial Vehicles (UAVs) or Remotely Operated (Underwater) Vehicles (ROVs), with real-time compensation and general-purpose data acquisition/recording. Allows configurations with a single high-sensitivity magnetometer, or with two magnetometers in a gradiometer setup.

Intended for applications that require compensation of the magnetic interference generated by the platform, typically in fixed-mount installations. When coupled with advanced real-time compensation technology, this offers a largely superior approach to towed-sensor installations, with lower residual errors and none of their inherent risks and logistical issues.

- **AARC52 Adaptive Aeromagnetic Real-Time Compensator** [*AARC52 Datasheet*]
 - Integrated magnetometer power/decoupler module for two sensors
 - Real-time compensation of total-fields and gradient
 - Includes fluxgate (vector) magnetometer for attitude reference
 - Integrated dual-frequency GPS receiver (L-Band corrections)
 - Built on the foundation of highly reliable hardware and firmware, and sophisticated and robust algorithms that have been proven in a multitude of installations
 - Consistent with the magnetics, ancillary data acquisition is delivered with unparalleled performance, accuracy and reliability
 - Full remote control and real-time monitoring from any Windows-based computer
- **Scintrex CS-VL Magnetometers** [*CS-VL Manual*]
 - Optically-pumped, self-oscillating cesium vapor magnetometer sensors for UAV/ROV applications
 - Very high sensitivity, narrow dead zones, low heading errors, simple integration – extensively proven in a variety of airborne installations
- **Flying-Cam UAV Helicopters** [*Website*]
 - Fully-integrated, fixed-mount solutions on industry-leading helicopters, designed to meet or surpass the most stringent general aviation standards
 - Single magnetometer or lateral gradiometer configurations
 - Electric (up to 10-kg payload, 60-min flight time), or turbine (up to 30-kg payload, 3-hr flight time)
- Ancillary instrumentation: PDU500 Power Distribution Unit (*PDU500 Datasheet*), radar and/or laser altimeters, navigation system, etc.



Photo courtesy of Flying-Cam.



General-Purpose Data Acquisition

- 4 analog inputs (differential, 16-bit resolution); embedded barometric-pressure & temperature sensors
- Ethernet (1 Gbps, multiple logical connections)
- Ancillary instrumentation:
Optional

Data Monitoring & Recording

- Embedded solid-state drive – real-time data recording
- Real-time graphical & numerical monitoring: any external VGA display
- Full remote control via Ethernet