



**SPECIFICATION SHEET** 

# INTEGRATE Integrated Data Acquisition/Navigation System for Airborne Survey



NUVIA Dynamics Integrated Multi-Parameter Airborne Console (IMPAC) is a real-time data acquisition and navigation system designed for airborne (fixed wing and helicopter) geophysical exploration, environmental science, and monitoring application. IMPAC is integrated in a single rack-mountable enclosure that meets aviation requirements. The IMPAC follows NUVIA Dynamics' modular design structure producing highly flexible and easily configurable instrument for Airborne surveys. Wide variety of proprietary "intelligent" instruments and third-party sensors and instrument (e.g. magnetometer sensors, radiation detectors, airborne gravity-meter) can be quickly and easily interfaced.

#### **Benefits**

- · Complete Data Acquisition System
- Integrated Navigation system Showing real time survey information
- Integrated MMS-8
  Magnetometer Processing
- Store and display a range of data from a variety of Geophysical Sensors
- · Customizable navigation and data displays

# **Key Figures**









## **Product Description**

IMPAC is a NEW real-time data acquisition and navigation system designed for airborne geophysical exploration and environmental science applications. IMPAC-M combines the field proven technology of NUVIA Dynamics's AGIS and MMS-8 instruments into a single rack-mountable enclosure. IMPAC-M follows NUVIA Dynamics's modular design structure allowing the system to become highly flexible and easily reconfigurable. The design allows a wide variety of NUVIA "intelligent instruments" and third-party sensors and instruments to be quickly interfaced. The system eliminates the need for much of the normal interconnect wiring between modules.



- ANAV Survey navigation with drape profile option; Recorded position and time can be synchronized with third party data.
- IMPAC Survey navigation with drape profile option; Data acquisition for variety of sensors.
- IMPAC-M Survey navigation with drape profile option; Data acquisition; support of up to 8 Cs magnetometers

#### **Performance Characteristics**

- · Rack-mountable airborne data acquisition system operating under Windows OS
- Multicore CPU, SSD hard drive, analog inputs, and power interface for multiple type of detectors
- · Imbedded MMS-8 magnetometer processor module with real-time magnetic compensation support
- Imbedded navigation module provides 2D and 3D navigation capability
- Color LCD touch screen (operator screen) display and keyboard
- · Pilot Guidance Unit (PGU) cockpit mountable 7" screen providing dedicated survey navigation information to pilots
- · Multiple instrumentation interfaces
- · Data recording directly to solid-state hard disk drive
- · Autonomous Mode: No Operator required

## **Product Specifications**

- · Data Acquisition software: AGIS (Airborne Geophysical Information System)
- · CPU 4th Gen Intel® Core™ Dual and Quad Core; BGA1364
- · Magnetometer Sensor Input: 8
- · Realtime and post processing Mag compensation
- · Interface for Multiple Sensors: 4 X USB (2x frontside, 3x backside), 8x RS232 serial ports
- · Eight 16-bit differential analog inputs
- GPS input and 2 buffered 1-PPS outputs for time synchronization
- · Multiple Ethernet connections
- · 28V DC power input
- · Weight: 6.5 Kg
- · Rack mountable

