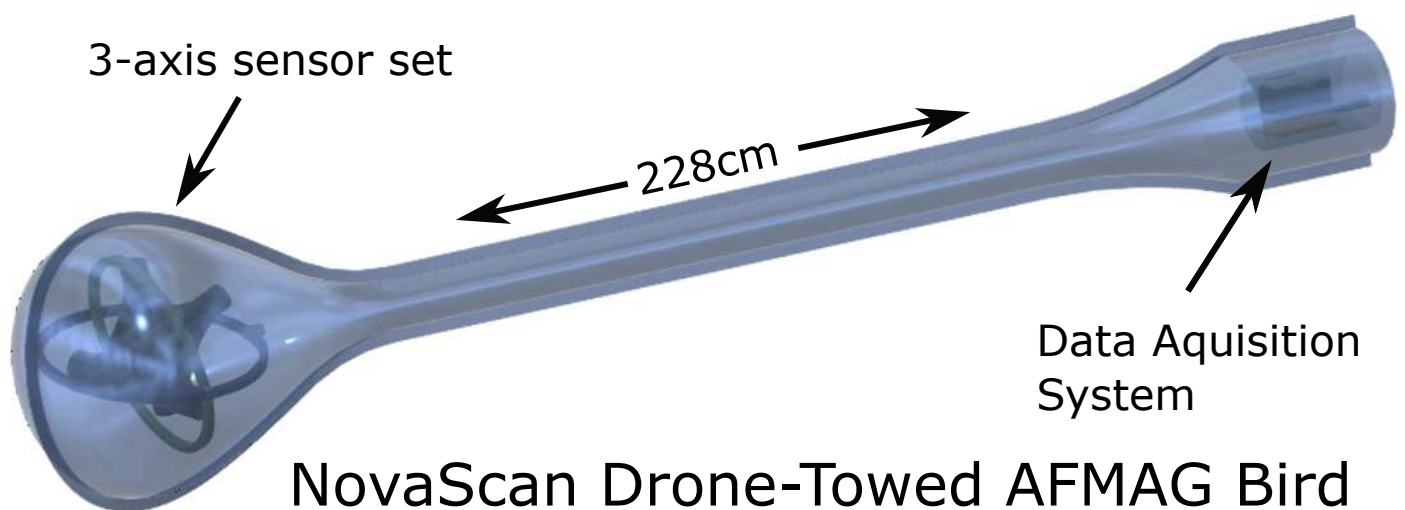


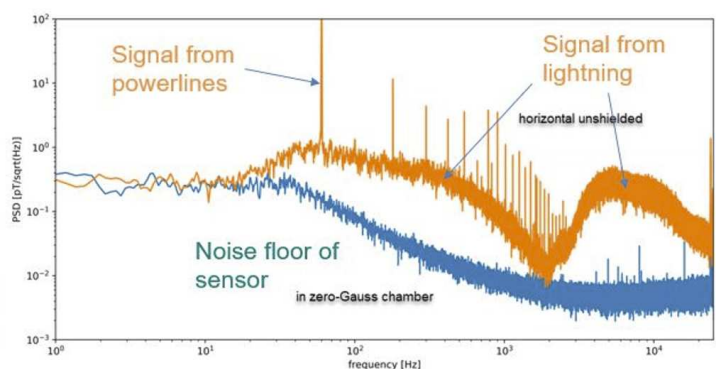
New Tools to Advance Mineral Exploration

Novaminex is developing new electromagnetic tools for mapping geology and for detection and characterization of sulphide mineral deposits.

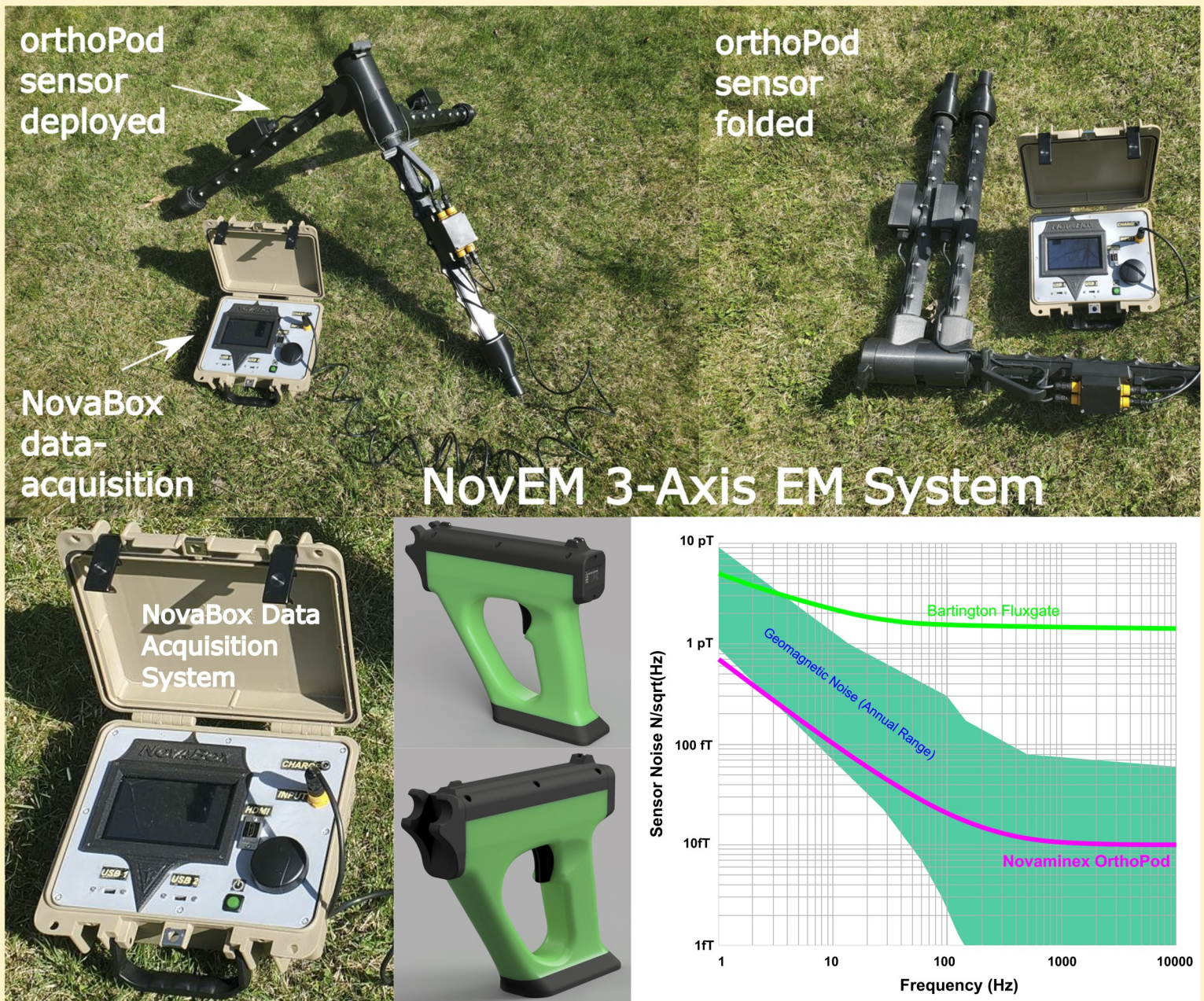
NovaScan is a lightweight AFMAG system which uses passive geomagnetic signals to create subsurface 3D maps of electrical conductivity. In addition to being able to detect shallow mineral deposits, NovaScan will be useful in resolving different lithologies and mapping structures. NovaScan will be a product available for sale to end users and contractors as a drone-towed or a backpack-portable system and will provide valuable geological information early in a project's life at a low cost and with low environmental impact.



Weight: 4Kg
Bandwidth: 100Hz-25kHz
Noise Floor: 4fT/rt(Hz) @5kHz
Noise Floor: 80fT/rt(Hz) @100Hz
Data Rate: 50,000 x 3 ch
Orientation: Low-drift gyro
Post processing: Scalar, Full Tensor



For deeper detection of sulphide deposits, Novamine is developing NovEM, a low-noise 3-axis sensor and receiver system that can be used for TEM or passive EM surveys. The 3-axis orthoPod magnetometer is comprised of three Novamine-24 sensors integral to its folding legs. It provides excellent noise performance over a wide band (0.2Hz-25kHz) and is designed with ease of production in mind allowing it to be built at a much lower cost than existing high-performance 3-axis systems. This should make it practical to conduct low-noise EM surveys in array-configurations with many independent receivers recording at the same time. Each orthoPod is paired with a NovaBox data acquisition system. The companion hand-held "Arrow" tool includes a low-drift gyro and provides accurate determination of the orthoPod orientation using a number of modes depending on the variability of the local static magnetic field.



Channels: 3 differential
Data Rate: 50,000
Timing: GPS (5us)
Input : 200k-ohm
Bandwidth: 1Hz-25kHz
Weight: 1.7Kg

Hand held "Arrow" tool to determine orthoPod orientation with precision IMU.

orthoPod noise performance