

## CMD Explorer Data Sheet

Geomatrix rents the CMD-Explorer from GF Instruments. The CMD Explorer is a multi receiver coil, EM conductivity instrument with receiver coils at 1.48m, 2.82m and 4.49m from the transmitter, in vertical dipole mode, this equates to effective depth penetrations of 2.3m, 4.2m and 6.7m respectively. In Phase (magnetic susceptibility) and Quadrature Phase (conductivity) readings can be made from all 3 dipoles simultaneously.



*CMD Explorer survey up and down a slope integrating geospatial positions.*

The CMD Explorer offers a simple user interface and serial/Bluetooth communications for integrating Geospatial positions from an external GPS system. The coil orientation can be changed from vertical dipoles (Horizontal Co-Planer) to Horizontal dipoles (Vertical Co-planner) by rotating the probe tube through 90°.

Data can be downloaded directly to a USB flash drive or through a Windows OS software package. files downloaded to t USB flash drive can then be opened and converted to different formats using the Windows OS software package.

We do not offer this unit for sale.

### Product Dimensions

| Physical          | Dimensions (L x W x H) | Weight |
|-------------------|------------------------|--------|
| (instrument only) | 485cm x 8cm x 8cm      | 8kg    |

### Technical Specifications

|                             |  |
|-----------------------------|--|
| <b>Measured quantities:</b> | Apparent conductivity in mS/m.<br>In-phase ratio in ppt (magnetic susceptibility). |
| <b>Measuring range:</b>     | Conductivity 1000 mS/m, resolution 0.1 mS/m.                                       |

In-phase ratio:  $\pm 80$  ppt, resolution 10 ppm.

|                               |  |
|-------------------------------|--|
| <b>Measurement accuracy:</b>  | $\pm 4\%$ at 50 mS/m.  |
| <b>Measurement modes:</b>     | - Manual measurement - Continuous measurement - GPS Manual measurement<br>- GPS Continuous measurement - Search mode |
| <b>Temperature stability:</b> | Better than 0.1 mS/m / $^{\circ}$ C (at slow temp. changes).   |
| <b>Maximum sampling rate:</b> | 10 Hz.   |
| <b>Communication:</b>         | USB.   |
| <b>GPS intergration:</b>      | Bluetooth/ serial.   |
| <b>Operating temperature:</b> | -10 $^{\circ}$ C to +50 $^{\circ}$ C.  |
| <b>Power:</b>                 | Internal exchangeable rechargeable Li-Ion battery pack (integrated fully automatic intelligent battery charger).     |