

## EM61Mk2 Data Sheet

The EM61-MK2A is a time domain metal detector which detects both ferrous and non-ferrous objects with excellent spatial resolution. Target response is a single, sharply defined peak, facilitating quick and accurate location. A single 200 litre (55 gal.) drum can be detected at depths greater than 3 metres.

Data from multiple time gates - three or four, user selectable - are recorded to provide a more complete measurement of the response decay rate for improved target characterisation (and discrimination). Early time gates improve the detection of smaller, as well as deeper targets; a mid-range time gate, at the same position as the original EM-61, offers comparison with, and continuation of original EM-61 data sets.



*EM61MK2 with GPS integrated.*

Data acquisition is supported by the Messa 2 ultra-rugged Windows 10 tablet rugged field computer. Important features include real-time graphic display of data for review and quality control; high capacity data storage (removable flash memory) for extended survey time; increased rate of data collection; and additional input connections for

simultaneous collection of EM and GPS data.

The system can be pulled as a trailer, in single or multiple unit configurations, or carried by an operator with a belt harness.

The EM61MK2A supports a variety of coil types which includes the EM61HH MK2A “Hand Held” and the EM61S “Submersible”. Both the EM61HH MK2A and EM61S are available as standalone configurations or as an addition to an existing EM61MK2A.

## Product Dimensions

| Physical          | Dimensions (L x W x H)             | Weight |
|-------------------|------------------------------------|--------|
| (instrument only) | 50cm x 100cm x 100cm (without gps) | 27kg   |

## Technical Specifications

|                             |  |
|-----------------------------|--|
| <b>Measured Quantities:</b> | Four time gates of secondary response in mV.   |
| <b>EM Source:</b>           | Air-cored coil, 1 x 0.5 m size   |
| <b>Current Waveform:</b>    | Uni-polar rectangular current with 25% duty cycle.   |
| <b>EM Sensors:</b>          | 1: Main: Air-cored coil, 1 x 0.5 m in size, coincident with EM source.<br>2: Focusing: Air-cored coil, 1 x 0.5 m in size, 30 cm above main coil. |
| <b>Measuring Ranges:</b>    | 10,000 mV.   |
| <b>Dynamic Range:</b>       | 18 bits.   |
| <b>Data Output:</b>         | Bluetooth or RS-232 Serial.  |
| <b>Power Supply:</b>        | 12 V rechargeable battery for 4 hour continuous use.   |
| <b>Data Storage:</b>        | 8GB internal Flash Memory (some data loggers support SD /Micro SD external memory).  |

## Gallery

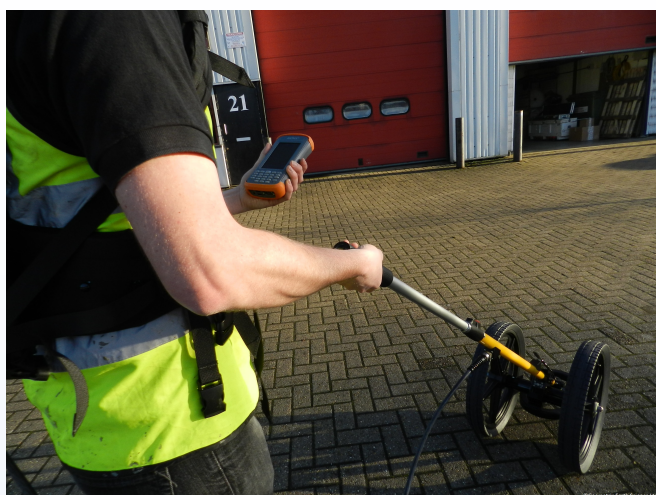




*EM61MK2 set-up for typical urban buried tank mitigation survey.*



*EM61MK2 set-up for typical brown field site.*



*EM61HH MK2 with odometer wheels.*



*EM61HH MK2 surveying urban site.*



*EM61MK2 HH coil*

## Videos

<https://www.youtube.com/watch?v=x-pc2wEqT-Q>  
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