

New!

CONDUCTIVITY METER

EM38-MK2

The new EM38-MK2 Ground Conductivity Meter effectively combines the performance features of all previous EM38 models in a single instrument: The EM38-MK2 provides measurement of both the quad-phase (conductivity) and in-phase (susceptibility) components, within two distinct depth ranges, to a maximum effective depth of 1.5 m, all simultaneously.

In addition, new standard features and options each provide additional benefits: integrated Bluetooth functionality provides the option of wireless data transmission; a power input connector allows for the use of external power sources; a rechargeable external battery pack extends the duration of instrument operation; and a portable calibration stand provides the convenience of an automated calibration.

With all that the EM38-MK2 provides, more information is now available in less time with less associated cost.



GEONICS LIMITED

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FEATURES

- the standard EM38-MK2 includes two receiver coils, each in the vertical dipole orientation, separated by 1 m and 0.5 m from the transmitter, simultaneously providing data within effective depth ranges of 1.5 m and 0.75 m, respectively; the instrument can be rotated such that the coils are in the horizontal dipole orientation, with effective depth ranges of 0.75 m and 0.375 m, respectively
- the optional EM38-MK2-1 includes one receiver coil only, in the vertical dipole orientation, separated by 1 m from the transmitter. To enhance functionality after purchase, the second receiver coil (at 0.5 m from the transmitter) can be retro-fitted to the EM38-MK2-1 at any time
- information on soil conductivity (quad-phase) and magnetic susceptibility (in-phase) is collected simultaneously
- with data from two components, each within two distinct depth ranges, all collected simultaneously, more information is available in less time with less cost
- new coil technology supported by temperature compensation circuitry improves temperature-related drift characteristics associated with the 1 m separation, as compared to the previous series of EM38 instruments, by a factor of two
- Bluetooth functionality is integrated within both the EM38-MK2 and EM38-MK2-1, providing reliable wireless communication with a compatible acquisition device (such as the Allegro CX field computer) within a 10 m distance
- supporting both walking and trailer-mounted surveys, a power input connector allows for the use of external power sources for extended field operations; an optional, lightweight, rechargeable battery pack provides for 25 hours of continuous operation
- an optional, collapsible calibration stand supports automation of the instrument calibration procedure. Once in the stand, the instrument can be calibrated within seconds without any requirement for iterative adjustments

TECHNICAL SPECIFICATIONS

Measured Quantity :	Apparent conductivity of the ground in millisiemens per metre (mS/m) at each coil separation	Sensor :	Two self-contained dipole receivers
	In-phase response in parts per thousand (ppt) of secondary to primary magnetic field at each coil separation	Intercoil Spacing :	1 and 0.5 metres for EM38-MK2 1 metre for EM38-MK2-1
Conductivity Ranges :	0 to 1,000 mS/m (4 digit digital meter)	Operating Frequency :	14.5 kHz
In-phase Ranges :	± 28 ppt for 1 m separation ± 7 ppt for 0.5 m separation	Communication :	a) RS-232 b) Bluetooth™ 1.2 – wireless
Measurement Precision :	± 0.1% of full scale	Temperature Range :	-30°C to +50°C
Primary Field Source :	Self-contained dipole transmitter	Power Supply - Internal :	9V alkaline battery (e.g. Mallory MN1604 or ENERGIZER L522)
		Power Supply - External :	Receptacle provided for external 9 to 12 VDC battery
		Battery Life :	5 hours continuous for MN1604 12 hours continuous for L522

WEIGHT AND DIMENSIONS

Instrument :	5.4 kg; 107x17x8 cm
Shipping :	14.0 kg; 114x20x26 cm



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