

# CMD-DUO

ELECTROMAGNETIC  
CONDUCTIVITY METER  
FOR DEEP SURVEY



Graded depth range (7.5 - 60 m)

Manual or continuous measuring modes

High temperature stability and noise resistance

Smart and rugged design

Rechargeable Li-Ion cells (one charging for 1-2 working days)  
or AA cells

Easy control system with graphical screen and large memory

Data download via USB port or flash disk

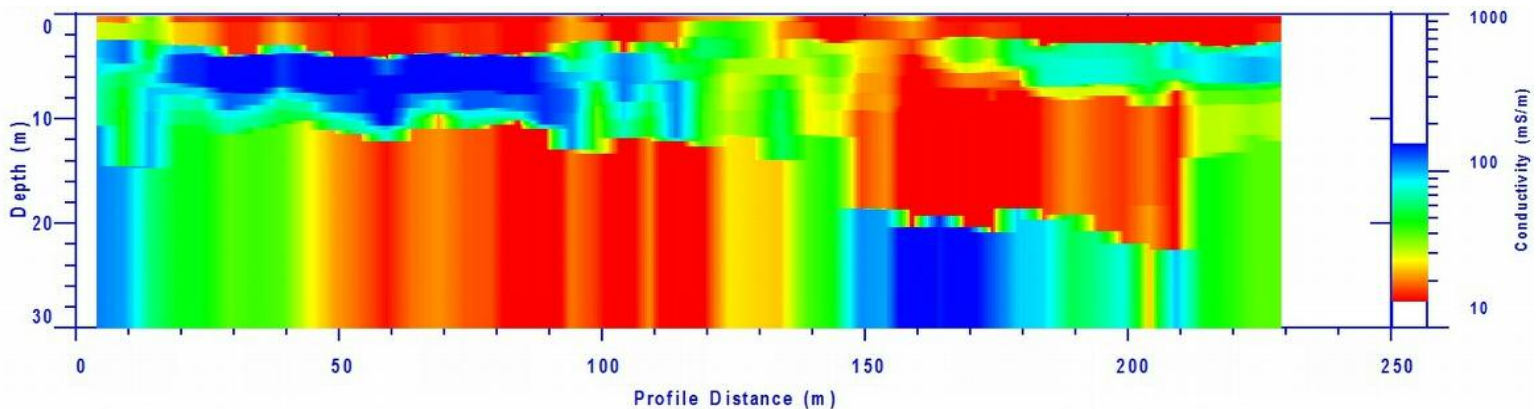
Bluetooth communication with probe

## Applications:

geological survey, water management (searching for potable water sources, groundwater protection, ground contamination monitoring),  
raw material prospecting, investigation of underground objects



**CMD-DUO** electromagnetic conductivity meter completes our family of advanced digital conductivity meters with the instrument for deep surveys. Easy operated set with variable dipole distance allows multidepth field survey with results suitable both for apparent conductivity and model sections (inversion by IX1D). Used electromagnetic measuring method covers wide range of ground conductivities independently on their upper layer and thus can be successfully used on sandy, stony, icy and asphalt surface. Calibrated conductivity values correspond very well with DC resistivity and can serve for fast distinguishing of geological materials and structures – bedrock, weathered zones, cavities, fissures, gravel, sand, clay and other sediments.



## Technical Specifications

### Probes:

Transmitter and receiver coils are connected with distance/reference cable.

- Measured quantities:
  - Apparent conductivity in mS/m
  - In-phase ratio in ppt (informative values)
- Measuring range: 1000 mS/m, resolution 0.1 mS/m
- Measuring accuracy:  $\pm 4\%$  at 50 mS/m
- Full and half depth range (vertical and horizontal orientation of dipoles)
- Power supply: Li-Ion battery packs (one charge up to 20 hours of work)
- Operating temperature:  $-10\text{ }^{\circ}\text{C}$  to  $+50\text{ }^{\circ}\text{C}$

Effective High/Low Depth Range	Dipole Center Distance
15 / 7.5 m	10 m
30 / 15 m	20 m
60 / 30 m	40 m

- Dimensions / Weight
  - Transmitter: 65 cm diameter / 9.5 kg
  - Receiver: 65 cm diameter / 6.2 kg
- Complete working weight of the set with 20 m cable is 17.7 kg.

### Control Unit:

Connection is provided by integrated Bluetooth technology

- Five modes of measurement:
    - Manual measurement
    - Continuous measurement
    - GPS manual measurement
    - GPS continuous measurement
    - Search mode
  - Measuring time: 1 – 20 s
  - Direct support of GPS receiver with UTM/UPS possibility
  - Data flash memory: 128 MB
  - Power supply: Li-Ion battery pack (one charge up to 32 hours of work)
  - Dimensions / Weight: 270 x 90 (145) x 60 mm / 0.7 kg
- (Features are identical with standard CMD control unit.)

### Standard Probe accessories:

- Transport aluminum case: 73 x 20 x 92 cm
- Transmitter and receiver handles
- 10 / 20 / 40 m distance/reference cables
- Spare Li-Ion battery for transmitter with charger
- 2 pcs of AC adapters (100-240 V, 50-60 Hz)
- Internal battery holders for AA cells

### Standard Control Unit Accessories:

- AC-adaptor (100-240 V, 50-60 Hz)
- Cable for 12 V car socket supply
- Internal battery holder for AA cells
- Carrying belt
- Cable for data download to PC and flash disk
- CD with software
- Operation Manual

### Optional Accessories:

- Spare Li-Ion batteries for transmitter, receiver and control unit
- Inversion and mapping SW (IX1D, Surfer)

