# ETMTS-2

HAND-HELD MINE DETECTION SYSTEM

ETMTS-2 is a new generation dual sensor hand-held mine detection system containing both Metal Detector (EMI) and Ground Penetrating Radar (GPR). The system is capable of operating in challenging military conditions.

ETMTS-2 device runs on two main modes, which are detection and identification. Audio warnings about the detection of buried targets are given to the operator by headphone or external speaker, and visual warnings are shown on LCD screen. Therefore, user may create his own identification decision through the audio-visual information produced by the system. There is a built in test (BI T) both on start up and during operation, which provides reliability. Data from the sensors, system warnings and battery level status are displayed on the screen. The system can communicate with the outer World through an Ethernet port if needed.
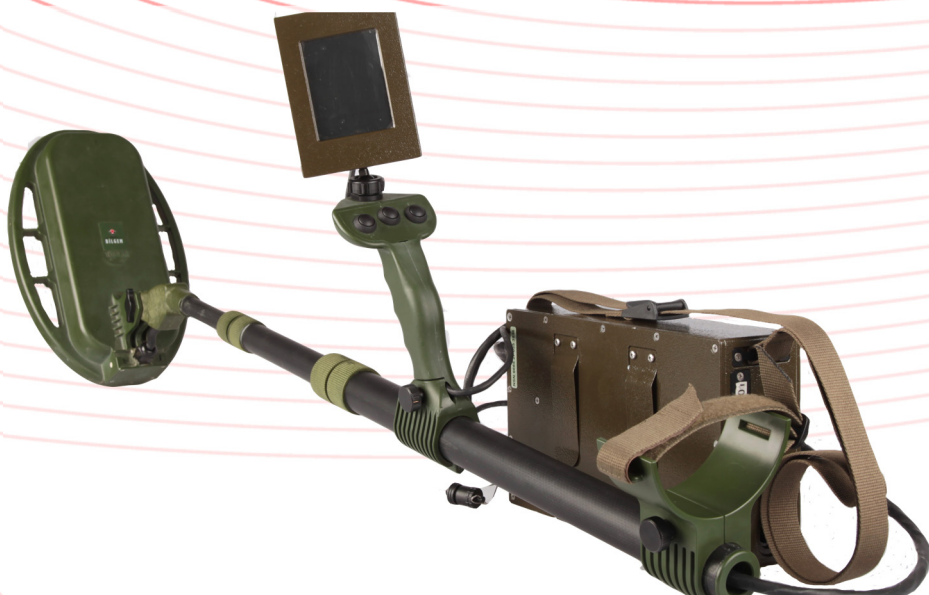
The operator can detect and localize both metallic and non-metallic buried mines and IEDs along a scanning path and can visualize suspicious territory and generate a prediction about the type of the buried objects utilizing automatic classification software.

The search head is designed optimally to obtain high antenna gain and high metal detection sensitivity. Thus, underground visualization can be obtained and small metallic parts can be detected.
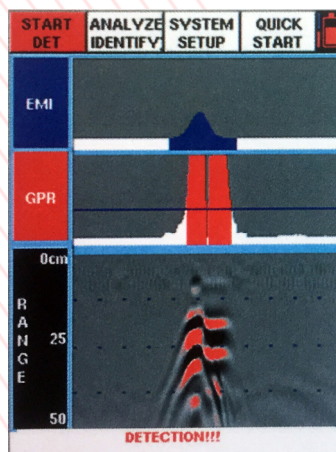
The system is compatible with the military standards MIL STD 810G and MIL STD 461F.

SENSORS

♦ EMI (Electromagnetic Induction) Sensor
♦ GPR (Ground Penetrating Radar) Sensor

CAPABILITIES

♦ Detection of metallic mines
♦ Detection of non-metallic mines
♦ Detection of IEDs
♦ Detection of embedded objects
♦ Precise target centering by audio-visual warnings
♦ Self-training capability to the operator

SPECIFICATIONS

Sensors	EMI (Electro Magnetic Induction) Sensor GPR (Ground Penetrating Radar) Sensor
Capabilities	Detection of metallic mines Detection of non-metallic mines Detection of IEDs Precise target centering by audio-visual warnings Self training capability to the operator
Units	Scanning arm Interface unit Search head Electronic Unit
User Interface	TFT LCD Monitor Tab based menu 3 Buttons for controlling
Physical Properties	Total weight < 5.5 kg Scanning arm length <160 cm
Robustness to Environmental	Compatible to MIL STD 810G standard (12 Tests) Compatible to MIL STD 461F standard (2 Tests)
Electical Properties	Li-ion battery 3.5 hours non-stop operation (@25^0C)
Operation Range	-25 to +55 ^{0}C
Performance in Controlled Test Site	Detection rate > % 90 Identification rate > % 80 False alarm rate < %20

Specification giver here may change without prior notice as the result of continued research and development work.