VALLON

TECHNICAL DATA

Metal Detector VMV8

Electronics

Dimensions:	41 x 33 x 18 cm
Weight:	12.5 kg
Power consumption:	11 - 30 V DC / 25 W

Search mat*

Dimensions:	2.3 x 2 m
Search width:	2.2 m
Weight without search heads:	90 kg
Weight search head:	2.2 kg each
Length detector cable:	12 m
Driving speed:	10 km/h max.

Mounting set

Weight:	22 kg
Length:	3.5 m

Compass

Dimensions:	10 x 6 x 4 cm
Weight:	0.7 kg

Car adapter 0.5 kg

GPS

Receiver:	
Dimensions:	18 x 16 x 7 cm
Weight.	1 kg
Antenna 19 cm diam.:	0.5 kg

Laptop

Dimensions:	5 x 29 x 34 cm
Weight:	4.4 kg

Relay box

Dimensions	36 x 16 x 9 cm
Weight:	3.6 kg
Contacts:	16 x 5 A

Marking System

Distance between control system and paint nozzles: 5 m max.
Different paint color available: red, orange, green, black, and blue

Temperature range:	10° C to 60° C
Power consumption:	12 V DC / 20 A

(16 paint nozzles, 8 channel)

GPR-Detector VRV16

by ERA Technology Ltd

Electronics

Dimensions:	19" rack 9U
Weight:	
Power consumption:	20-30 V DC, 200 W

Antenna

Dimensions:	23 x 15 x 7 cm
Cable length:	10 max.
Search width:	2.2 m
Target:	AT-Mines

Driving Speed 10 km/h max.

* size and weight of the mat depends on number and type of the sensors and type of the vehicle.

All technical data are subject to change without prior notice.

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VALLON

Detectors made in Germany

Multi Sensor Detection System VMV8

- Customized Solution for different vehicles
- 8-channel metal detector
- GPS navigation
- Computer-aided data survey and evaluation
- Relay output for brakeing and marking systems
- Search width 2.2 m
- Optional 16 channel GPR system additionally

Searching with Excellence

APPLICATION

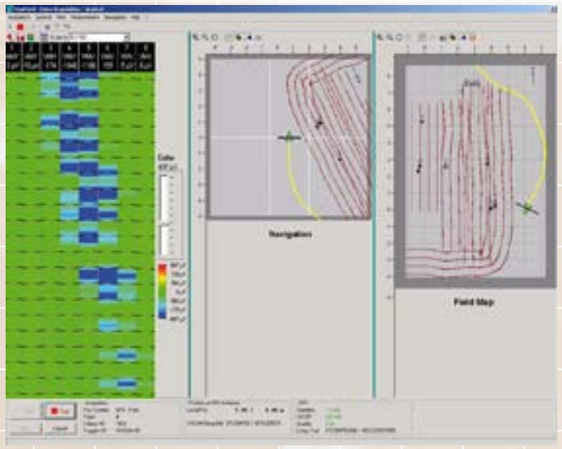
The multi sensor system VMV8 is useful to detect metallic objects in the ground and, using additionally the optional GPR system, metal-free targets as well. The sensor platform consists of a flexible mat which can be mounted in front of a vehicle, at its rear or at its sides allowing the search of street borders, for example. This system is the optimal solution for quick survey of large areas.

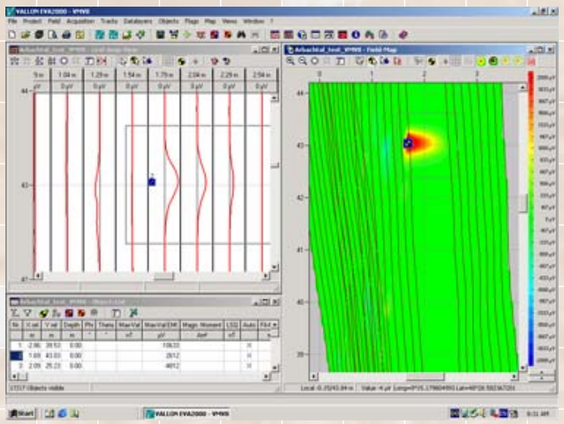
The ground pressure of the vehicle should be low for not activating AT mines, and the wheel rigid enough in order to AP mine explosion.

METAL DETECTION SYSTEM

The metal detection system is based on the well-proven Vallon mine detection electronics. The 8 search heads (can be individully exchanged) are mounted flexibly on a mat. The electronics unit is a compact rigid housing and is controlled by a ruggedized laptop which also serves for navigation and evaluation of the measured data.

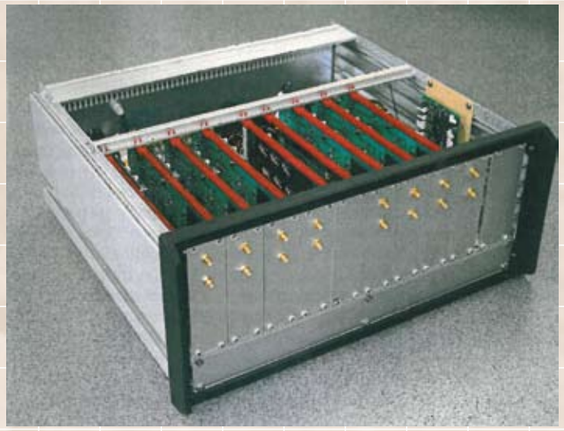
The display shows the coloured map of the measured data in real-time or the overview of the tracks covered. The signal output controls a relay box for the connection of an automatic brake and / or a 8-channel marking system.

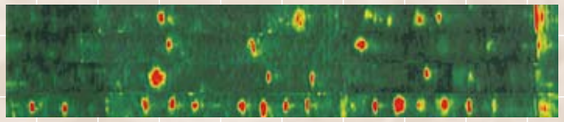




GROUND PENETRATING RADAR SYSTEM (GPR)

Since the metal detection system gives a signal for each detected metal part, the false alarm rate in urban areas may be quite high. Therefore, additional information from a GPR signal will be very helpful. The 16 GPR antennas (indivudually exchangeable) are also mounted flexibly on the mat. The GPR electronics processes the measured signals and displays this information in a coloured map, indicating the presence of man-made objects. That means, the measured signal of the metal detector can be suppressed if the GPR does not detect any housing around this metal part. Tests with handheld GPR Systems showed that by using this dual-sensor technique the false alarm rate is reduced by factor 5 at least.





8-channel GPR system developed by ERA Technologies LTD, UK

MARKING SYSTEM

The 8-channel marking system is controlled by the computer of the metal detector or the common evaluation system of the metal detector and GPR. It consists of
- control electronics
- pump and valves
- spray nozzles
- paint tanks of either one 500 liter or 2 x 250 liter
- tubing needed
- quick couplers for paint system

Marking system developed by MECHEM (PTY) LTD, South Africa