



OPTIONAL ACCESSORIES

UXO SEARCH HEAD

The large diameter search head which is available as special option provides for the detection of metallic mines and UXO to large depths below the surface with reliable and consistent operation.

It is delivered completely with a soft carry bag.

STICK PROBE

For detection in bushes or trees, the detector electronics can be connected to a stick probe.

Technical Data

General:

Power supply:	3 ea. 1.5 V standard batteries D-size or 3 ea. 1.2 V rechargeable battery KR35/62
Battery life:	up to 25 hours depending on battery type and SOIL program
Sweeping speed:	0.2 - 1.5 m/s — standard 0 - 0.2 m/s — pinpointing
Operation temperature:	-31° C to +63° C
Storage temperature:	-51° C to +71° C
Environmental conditions:	According to MIL STD 810F 501.4-II, 502.4-I, 502.4-II, 503.4, 506.4-III, 514.5 C1
Search programs:	2 soil programs (normal, mineralized)
Metal alarm:	acoustic via loudspeaker or earphones visual via LED-bargraph vibration alarm
Power line suppression:	automatic
Waterproof:	up to 4 meters

Dimensions:

Search head (slim):	30.8 x 17.0 cm
UXO search head (Option):	61.5 cm Ø
Stick probe (Option):	4 cm Ø length: 44.5 cm
Length of telescopic carrying bar with slim search head:	min. 92.5 cm max. 126 cm
with UXO search head (Option):	min. 98.4 cm max. 132.4 cm
with stick probe (Option):	min. 93.5 cm max. 127.8 cm
Backpack with slim search head:	approx. 55 x 28 x 15 cm
Carry bag UXO search head (Option):	approx. 66 x 70 x 11 cm
Hard case (Option):	approx. 55.5 x 35 x 23 cm

Weights:

Complete detector set during operation (with batteries**)	
- with slim search head:	approx. 2.5 kg
- with UXO search head (Option):	approx. 3.1 kg
- with stick probe (Option):	approx. 2.5 kg
Transport weight* in field backpack:	approx. 3.9 kg
with field backpack in hard case:	approx. 9 kg

*) including operation manual, field manual, one set of batteries

**) measured with type VARTA industrial No. 4020

NATO-STOCK-Number 6665-12-398-0628

VMH3CS Mine Detector

TWO-PIECE METAL DETECTOR

- Operates with
 - slim search head
 - UXO search head
 - stick probe
- Ultra high sensitivity
- Pinpoint mode
- Highly effective automatic ground compensation
- Metal alarm: audio, visual and vibration
- Length continuously adjustable
- Input for firmware upgrade
- UXO firmware available



All technical data are subject to change without prior notice.

Dimensions ± 3 %

Weights ± 10 %

Issue 05/2018

VMH3CS MINE DETECTOR

The Vallon VMH3CS detector is designed to meet the very specific needs of the mine clearance professionals in military and humanitarian demining scenarios.

Its mechanical design ensures a comfortable use on a daily routine basis.

VMH3CS is especially recommended in areas with severe laterite conditions or single mineralized stones.

The modern DMPI technology (Digital Magnetic Pulse Induction), and the cable free design is the logical result from close cooperation with military, humanitarian and commercial mine clearance personnel.

The operating length of the VMH3CS can be adjusted during operation in just a few seconds. The extreme short length for prone position meets the special requirements of the professional deminers all over the world.

Setting into Operation

The VMH3CS requires only minimal operator training.

- Remove the detector from the backpack

- Connect both parts of the detector and fix them tightly
- Adjust the telescopic bar length
- Insert the batteries and select the SOIL program
- SOS (Switch ON & Search)

Trained operators can start in less than 30 seconds.

Search Head with Telescopic Pole

The rugged search head contains the Digital Pulse Induction Sensor with integrated noise reduction features. The slim shape allows free view to the soil and easy operation in difficult and dense vegetation, rocks, shallow water and mud. This unique design provides precise pinpointing and an excellent separation between narrow placed targets without loss of detection speed.

The inner and outer tube of the telescopic pole are protected against twisting. The length of the telescopic pole can be adjusted from 92 cm to 126 cm in just a few seconds.

position for proning



position for kneeling



position for standing



Modern Electronics Unit

The ultra modern digital electronics withstands all typical environmental and vibration requirements and meets the MIL STD 810F. It operates with 3 standard batteries (D-size), Alkaline or rechargeable type up to 25 hours.

A splash-waterproof non magnetic loudspeaker is built-in to the electronic compartment.

A non magnetic headset can be connected.

An automatic continuous self check of six important functions including cable damage and battery level control is the life insurance for the deminer. System failures are immediately indicated by a special audio and visual alarm.

The automatic detection level control guarantees a long-term constant sensitivity for hours of operation independent of the battery level, temperature and other environmental conditions.

The front panel contains all controls.

The VMH3CS has one mode selector in order to set the main detection features:

off: OFF

normal: normal soil

mineral: mineralized soil



volume control



Ergonomic Operation

The operation and indication elements are integrated in the hand grip and can easily be operated with the thumb.

The LED-bargraph with 14 elements is clearly visible even in the sunlight. The length of the bargraph is proportional to the metal alarm.



A vibration alarm is completing the acoustic and visual alarm.

Fine adjustment of the detector is done by means of the four rigid push buttons:

- : decrease (volume, sensitivity)
- +: increase (volume, sensitivity)
- ⊕: compensation (ground balance)
- ⊖: pinpointing

Transportation

The two parts of the VMH3CS are stored in a small field backpack.

A watertight hard case can be delivered optionally.



Digital Output

For computer-aided detection of unexploded ordnances and for archiving the measuring data of a survey field the front panel of the VMH3CS contains a watertight data output.

Via the serial interface, the VMH3CS can be connected to the Vallon Data-loggers or directly to a Laptop, provided that the evaluation software VALLON EVA2000® has been installed.

The same interface allows to update the firmware of the VMH3CS respectively to realize your individual requirements.

