

# **VESALA MPL7-33 MicroSonde User Manual**

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#### OFF

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**VESALA MPL7-33 MicroSonde** 



This manual contains i mportant operating and safety information. Please read all instructions carefully before use. Failure to understand and follow instructions and cautions may lead to damage to your equipment and working environment. The serial number of your device is indicated on your MicroSonde and on the storage case. The serial number may wear off, enter the serial number below and always refer to this information when you need to contact the manufacturer.

•	VERSION NUMBER X00-B
•	SERIAL NUMBER

### **IMPORTANT SAFETY INFORMATION**

The following symbol is used throughout this manual mark important instructions. Please take care when meeting this symbol:

### **GENERAL INFORMATION**

The MicroSonde MPL7-33 is small battery-operated transmitter that emits a 33 kHz signal, which can be located by a receiver operating on the same frequency. The MicroSonde is intended to be used in non-conductive ducts, cavities and structures. The device is intended for professional use.

### **ITEMS SUPPLIED**

1	MicroSonde transmitter	MPL7-33
2	Lithium battery	BR535
1	Battery compartment with female M6 thread	MPL7-M6
1	Battery compartment with female M5 thread	MPL7-M5
1	Case with quick reference guide	SB9

# BATTERY INSTALLATION, TURNING ON AND OFF

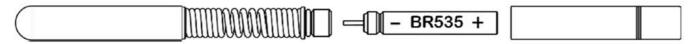


Figure 1: Inserting battery

Insert a BR535 battery. Observe polarity (Figure 1). To turn the MPL7-33 on, tighten the battery compartment. The LED at the tip of the MicroSonde will start flashing. Take care to fully tighten to avoid water getting into the device. To turn the MicroSonde off, unscrew battery compartment. Always remove the battery completely when you are not using the MicroSonde. When the battery has insufficient capacity left for carrying out measurements, the LED will turn off. Replace the battery. Low temperatures reduce the operating time of the battery. High mechanical stress, high ambient temperatures or immersion into liquids can cause leakage, fire or explosions of the batteries.

**Precautions:** Protect the batteries from mechanical influences and high ambient temperatures. Do not drop or immerse batteries into liquids.

## **OPERATING THE DEVICE**

When the battery is inserted and the battery compartment attached, the MicroSonde will start emitting a 33 kHz signal. The location can now be detected with a receiver that operates at the same frequency, such as the Vesala CL43. Before use, ensure the MicroSonde is fully functional by locating the signal with a corresponding receiver. Refer to the user manual of the receiver on pinpointing the location of the MicroSonde. You can attach the MicroSonde to a duct rod, cable rodder, snake rod, push or pull rod using the thread at the end of the battery compartment. When using the device for blowing with compressed air, always blow with battery compartment end first. Refer to the user manual of the blowing unit and follow safe work practices.

• Use of compressed air can lead to the MicroSonde exiting the duct at great speed.

**Precaution:** Always use a catcher at the end of the duct. If changing the direction of the blowing due to the device getting stuck, remember to move the catcher to the other end of the duct. Do not blow the MicroSonde with pressure exceeding 6 bars. Always use safety goggles, when using the MPL7-33 with compressed air.

### **MAINTENANCE**

### **CLEANING**

Clean with clean, soft cloth. Do not use abrasive agents or solvents for cleaning. Take care to avoid dirt getting into the unit. Regularly inspect O-ring and replace if damaged. If water gets into the battery compartment, allow it to dry at room temperature.

# **STORAGE**

Store inside storage box. Respect the temperature limits stated in the technical data when storing the device. Always remove the batteries from the product during storage to avoid leakage. After a long time of storage, check the function of the device.

TROUBLESHOOTING				
Problem	Possible cause	Remedy		
MicroSonde does not	Battery is weak or	Replace battery, ensure		
turn on.	wrongly placed.	polarity.		
	MicroSonde is damaged	There are no serviceable		
		parts in the device.		
		Contact your distributor		
		or manufacturer.		
MicroSonde	Battery is weak.	Replace battery		
unintentionally turns off.				
No signal is detected.	Battery is weak.	Replace battery.		
	Device is used in			
	conductive duct.			

# **DISPOSAL**

This product is an electric device and must be collected separately for disposal according to the European Directive on waste electrical and electronic equipment.

# For business users in the European Union:

If you wish to discard electrical and electronic equipment, please contact your supplier or manufacturer for further information. Information on Disposal in other Countries outside the European Union: This symbol is only valid in the European Union. If you wish to discard this product, please contact your local authorities or dealer and ask for the correct method of disposal.

# **TECHNICAL SPECIFICATIONS**

Dimensions; length x diameter	114 mm x 7.5 mm
Weight including BR535 battery	15 g
Typical range in air*	5.1 m
Operating frequency	32.768 kHz
Frequency tolerance	± 3 Hz
Transmitting power	<10 mW
Signal type	Continuous
Battery type	1 x BR535
Typical operating time	6 hrs at 20°C
Typical power consumption	8 mA at 3.0 V
Operating temperature	-10° C to +50° C
Storage temperature	-20° C to +60° C
Protection	IP67, IK07
Max. ambient pressure, air**	6 bar
Max. ambient pressure, water	4 bar
Mounting threads	M6F, M5F
Max. speed	10 m/s
Max. speed with shock absorber	20 m/s

- will vary with choice of receiver, battery voltage, ambient noise and interference.
- Ambient pressure, not jetting pressure. Depending on route, jetting pressure can be higher.

### **ACCESSORIES & CONSUMABLES**

- Spare battery kit, BR535-kit10, 10 pcs BR535 in a storage box V14047
- O-Ring, Ø 4.0 x 1.0 NBR70 N01226
- Shock absorber v2, IV566-80, Ø 8.0 mm V14576
- Shock absorber v2, IV566-96, Ø 9.6 mm V14581

# **SAFETY INSTRUCTIONS**

Use the following safety guidelines to help ensure your own personal safety and to help protect your equipment and working environment from potential damage. The absence of instruction can lead to incorrect or adverse use, and can give rise to accidents with far-reaching human, material and financial consequences.

**Precaution:** All users must follow the safety instructions given by the manufacturer in this manual.

Watch out for faulty operation if the product has been dropped or has been misused, modified, stored for long periods or transported. Precautions: Periodically carry out test measurements with a 33 kHz receiver.

### SCOPE OF OPERATION

#### Permitted use:

The Vesala MicroSonde MPL7-33 is a short-range inductive 32768Hz transmitter intended to be used in non-conductive ducts, cavities, and structures for locating obstructions and duct calibration.

Adverse use:

- Use of the product without this user manual
- Use of the device against the instructions given in this user manual
- · Use outside of the intended limits
- · Opening or modifying the device

H. Vesala Oy disclaims any responsibility for damages to persons or property caused by the operation of the device in violation of the instructions contained in this manual. Adverse use can lead to malfunction and damage.

Precautions: The device is not to be operated until the user has familiarized himself with this user manual.

### **EMC**

Electromagnetic compatibility is taken to mean the capability of the product to function smoothly in an environment where electromagnetic radiation and electrostatic discharges are present, and without causing electromagnetic disturbances to other equipment. The device meets the strict regulations and standards which are in force in this respect, still, the possibility that other equipment may be disturbed or that humans or animals may be affected cannot be excluded.

#### MANUFACTURERS WARRANTY

H. Vesala Oy provides a warranty for the MicroSonde MPL7-33 one year from the date of purchase. The warranty covers material or manufacturing defects occurring during this time. During the warranty period H. Vesala Oy shall, at his sole discretion, either repair or replace the defective device or any component thereof. The following are excluded from the warranty: Damage due to improper use, normal wear and tear and defects which only insignificantly impair the value or suitability of use. Any tampering by unauthorized persons shall render the warranty void. Users are advised to contact the manufacturer in case of faults or queries relating to the use of the device.

### **DECLARATION OF CONFORMITY**

Hereby, H. Vesala Oy, declares that the radio equipment type MicroSonde MPL7-33 is in compliance with the essential requirements and other relevant provisions of Directive 2014/53/EU The full text of the EU declaration of conformity is available at the following internet address: <a href="http://www.vesala.fi/MPL7-33/doc">http://www.vesala.fi/MPL7-33/doc</a>

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<u>VESALA MPL7-33 MicroSonde</u> [pdf] User Manual MPL7-33M6F 7.5 MM 33 KHZ, MPL7-33 MicroSonde, MPL7-33, MicroSonde

# References

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