

MULTITHERM

4688582

EN

Instruction Manual

Digital thermometer with external temperature sensor

DE

Bedienungsanleitung

Digitales Thermometer mit externem Temperaturfühler

FR

Manuel d'utilisation

Thermomètre digital avec sonde de température externe

IT

Istruzione d'uso

Termometro digitale con sensore di temperatura esterno

ES

Manual de instrucciones

Termómetro digital con sensor de temperatura externo

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1.0 INTRODUCTION

Congratulations on your purchase of this device. The MULTITHERM is a Digital temperature measuring device for different applications. The latest manual can be downloaded from www.refco.ch.

2.0 GENERAL INFORMATION

Before you start working with the MULTITHERM, please read the operating instructions carefully. They contain important information for the successful operation, maintenance and disposal.

Conformity

	This device complies with the relevant European directives. The Declaration of Conformity is available from the specified contact details or on the REFCO website.
RoHS	RoHS: Restriction of Hazardous Substances This device meets the requirements of the RoHS EU directive. RoHS 2011/65/EU including 2015/863/EU The device does not contain any prohibited substances above the maximum permissible values.
REACH	In accordance with Article 33 of REACH Regulation 1907/2006, we confirm that this device and its packaging complies with Article 57 of REACH Regulation 1907/2006. This device and its packaging do not contain any of the SVHC specified in the current candidate list (Article 59) at concentrations above 0.1%.

Important safety instructions

Please read and follow all safety instructions carefully.

Explanation of symbols:

	Warning!
	...indicates a possible dangerous situation that can lead to serious injury if not avoided.
Safety instructions:	
	REFCO expressly states that the products must only be used by professionally trained experts. No use by children or unqualified persons.
	Improper handling of the MULTITHERM can lead to serious injuries.
	The device must not be used in EX zones.

Intended use

The MULTITHERM is a temperature measuring device and is used for measuring temperatures. It can be used to measure the temperature in ventilation ducts, in liquids or on a pipe. It can also be used to check the temperature of food in case of service.

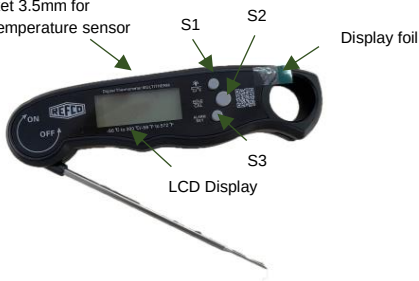
3.0 SPECIFICATION

Property	Value
Sensor Type	NTC (100k Ω @25°C)
Temperature range	-50°C – 300°C (-58°F – 572°F)
Accuracy	$\pm 1^{\circ}\text{C}$ ($\pm 2^{\circ}\text{F}$) @ -20°C – 150°C (-4°F – 302°F)
Units	°C and °F
Display	LCD with backlight
Battery	CR2032
Packaging	Blister
Material	ABS
Colour	Black
Ambient temperature	0°C – 60°C (32°F – 140°F)
Storage temperature	0°C – 45°C (32°F – 113°F)

4.0 PRODUCT AND PART DESCRIPTION

4.1 PRODUCT

Jack socket 3.5mm for
external temperature sensor



5.0 TRANSPORT, PACKAGING AND STORAGE

5.1 TRANSPORT

The MULTITHERM is packed in a blister pack to protect the parts. Protect the device from vibration and scratching during transport. After unpacking the device from the blister casing, keep it in a tool case or tool bag. The storage conditions must also be maintained during transport.

6.0 COMMISSIONING AND FUNCTIONS

6.1 COMMISSIONING

Remove the display foil and the battery interruption. The unit switches on when the temperature sensor is folded out or the second temperature sensor is plugged in.

6.2 FUNCTIONS

Switch on / off	To switch on the MULTITHERM, unfold the integrated temperature sensor or plug in the external temperature sensor. The MULTITHERM switches off when the integrated temperature sensor is folded in and the external temperature sensor is removed or after the automatic switch-off.
Measurement with external temperature sensor	Plug in the external temperature sensor, OUT appears on the display and the temperature from the external temperature sensor is displayed.
Switching the backlight on / off	Press the S1 button briefly to switch the backlight on and off.
Select temperature units	Press the S1 button ≥ 2 seconds to change the temperature unit.
Automatic switch off	After 10 minutes, the MULTITHERM switches off automatically. Except when the temperature is above 50°C or the change in temperature is above 2°C.

Hold function	Pressing the S2 briefly holds the current temperature in the display. The display now shows HOLD.
Calibration	Calibration can be done with ice water. Hold the temperature sensor in the ice bath and press S2 for 5 seconds. Make sure that the temperature sensor is in the ice water during the entire calibration process and that nothing flashes. After that, the calibration is done.
Alarm	By pressing the S3 button, the alarm value starts flashing. This can now be changed. With S1 the alarm value is increased and with S2 the alarm value is decreased. Pressing S3 sets the alarm. If the alarm value is exceeded, there is an acoustic alarm and at the same time the Alarm set flashes on the display. To acknowledge the alarm, press the S3 key.

7.0 MAINTENANCE

The digital thermometer requires maintenance when used regularly:

Cleaning:

Clean the screen and the housing surface with a cloth and cleaning agent. Do not use corrosive cleaning agents or solvents to clean the unit. Weak household cleaners and mild detergents may be used.

8.0 TROUBLESHOOT

	Problem	Action
Measuring	The unit does not switch on.	Unfold the integrated temperature sensor.
		Make sure that the contact breaker in the battery compartment has been removed.
		Change the battery (CR2032).
		Check the polarity of the battery.
	Wrong temperature is displayed with a temperature sensor.	Please calibrate the temperature sensor.
Calibration	The error message Err appears on the display.	The calibration was carried out with the wrong prerequisites. Make sure that the ice water has a temperature close to 0.0°C.

9.0 RETURN DISPOSAL

The MULTITHERM has been developed for long-term use. When decommissioning the device, the user must follow local disposal regulations. The housing is made of ABS.



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