Bluetooth Water Hardness Tester - Wireless Pen Type Hardness Meter - 0.05-200 mmol/L, ±1% F.S.

Model **MSHAD-BT40SWISS** | Brand **Master Science**





The Master Science Bluetooth Water Hardness Tester is a pen-shaped probe with a solid-state sensor that sends its readings wirelessly to an Android smartphone or tablet. The mobile device acts as the display, memory and control panel, while the tester itself stays small enough for a pocket.

KEY HIGHLIGHTS

- No cable, no bench meter
- Six hardness units
- Controlled calibration
- Protected settings
- Unattended logging

AT A GLANCE

0.05 to 200 mmol/L RANGE (CONCENTRATION)	**: the limit alarm flags them immediately.** OUT-OF-RANGE VALUES ARE MISSED
0 to 1122 °dH RANGE (GERMAN DEGREE)	**±1% F.S.** ACCURACY

Request a Quotation
Contact us for pricing, configuration options and delivery details.

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Scan to view online

Overview

Hardness is measured from 0.05 to 200 mmol/L and can be shown in °dH, °e, °fH, gpg, mg/L or mmol/L. The Master Science Bluetooth Water Hardness Tester is calibrated on 2 to 5 points, and its setup menu holds 12 options including alarms, timed readings and password protection.

Specification data for the Master Science Bluetooth Water Hardness Tester are set out below.

For a stand-alone laboratory instrument, see the Master Science benchtop water hardness meter.

Key Benefits

No cable, no bench meter
: the Master Science Bluetooth Water Hardness Tester reports to your phone or tablet.

Six hardness units
: °dH, °e, °fH, gpg, mg/L and mmol/L.

Controlled calibration
: 2 to 5 points with a report of date, time, points and slopes.

Protected settings
: 6-digit password blocks unauthorised changes.

Unattended logging
: timed readings from 10 to 300 seconds.

Technical Specifications

GENERAL

Brand	Master Science
Model Number	MSHAD-BT40SWISS
SKU	MSHAD-BT40SWISS
Range (Concentration)	**0.05 to 200 mmol/L**
Range (German Degree)	**0 to 1122 °dH**
Range (English Degree)	**0 to 1404 °e**
Range (French Degree)	**0 to 2000 °fH**
Range (Grains per Gallon)	**0 to 1170 gpg**
Range (CaCO3)	**0 to 20000 mg/L**
Range (CaO)	**0 to 11220 mg/L**
Range (Ca2+)	**0 to 8020 mg/L**
Resolution	0.001, 0.01, 0.1, 1
Accuracy	**±1% F.S.**
Calibration Points	2 to 5 points
Calibration Solutions	0.01, 0.1, 1, 10, 100 mmol/L
mV Range	**±2000.0 mV**
mV Resolution	0.1, 1 mV, selectable
mV Accuracy	**±0.2 mV**
Temperature Compensation	0 to 50°C / 32 to 122°F, manual
Stability Criteria	Fast, standard, slow
Measurement Modes	Continuous or auto-read
Timed Interval Readings	10, 30, 60, 300 seconds or off
Calibration Due Alarm	1 to 99 days or off
Password Protection	6 digits
Connectivity	Bluetooth 4.0 or later
Max Wireless Range	**10 m / 32.8 ft**
Compatible Devices	Android smartphone or tablet
Power	2 x 1.2 V lithium batteries or AAA batteries

DISPLAY & DATA	
Data Transfer	Send to memory or printer
Small meter screens are hard to read	: results appear on a phone or tablet display.

DIMENSIONS & WEIGHT	
Dimensions	175 (L) x 40 (Dia.) mm
Net Weight	0.1 kg

COMMON PROBLEMS THIS TESTER SOLVES	
Common Problems This Tester Solves	Portable hardness testing usually means compromises; this design removes several of them.
Out-of-range values are missed	**: the limit alarm flags them immediately.**
Anyone can alter calibration	: a 6-digit password locks calibration and settings.
Carrying several meters to site	: conductivity and dissolved oxygen Bluetooth testers can share the same device.

Applications

The Master Science Bluetooth Water Hardness Tester is practical for hardness checks in: Drinking water and household water surveys Water softener and treatment system checks Boiler and cooling water monitoring Field sampling and teaching work

Measurement

- Bluetooth water hardness tester supplied with a solid-state sensor
- 2 to 5 point calibration with five selectable concentration points
- Selectable units: German degree (°dH), English degree (°e), French degree (°fH), gpg, mg/L and mmol/L
- Manual temperature compensation removes error caused by temperature deviation
- Auto-Read function senses and locks the measurement endpoint

Data and Control

- Timed interval readings send measurement data to memory or a printer
- Limit alarm alerts when a reading goes beyond the specified range
- Calibration due alarm prompts regular calibration
- Calibration report shows date, time, calibration points and slopes
- Password protection prevents unauthorised calibration and settings
- Multiparameter measurement: Bluetooth conductivity and dissolved oxygen testers can connect to the device at the same time
- Reset function restores all settings to factory defaults