

LETZTEST WATER CHECKPACK BASIC

TECHNICAL DATASHEET

A fully equipped water testing backpack for rapid water quality assessment in the first 72 hours of an emergency. Independent of electricity and complex procedures, it enables reliable microbiological and physico-chemical testing directly in the field — in parallel for up to three technicians.

Designed for use by trained laypersons, medical personnel, or health officers as part of an organizational response, it contains all essential tools for sampling, testing, safe waste disposal, clear instructions, data management, and long-lasting consumables.

Easy-to-use LETZTEST Tubes provide rapid microbiological analysis, while LETZTEST Visual Color Comparators and further user-friendly physico-chemical equipment deliver reliable water testing results.

A product of LETZTEST
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Web: www.letztest.com

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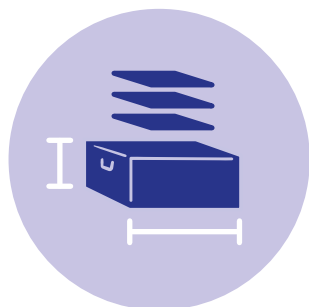




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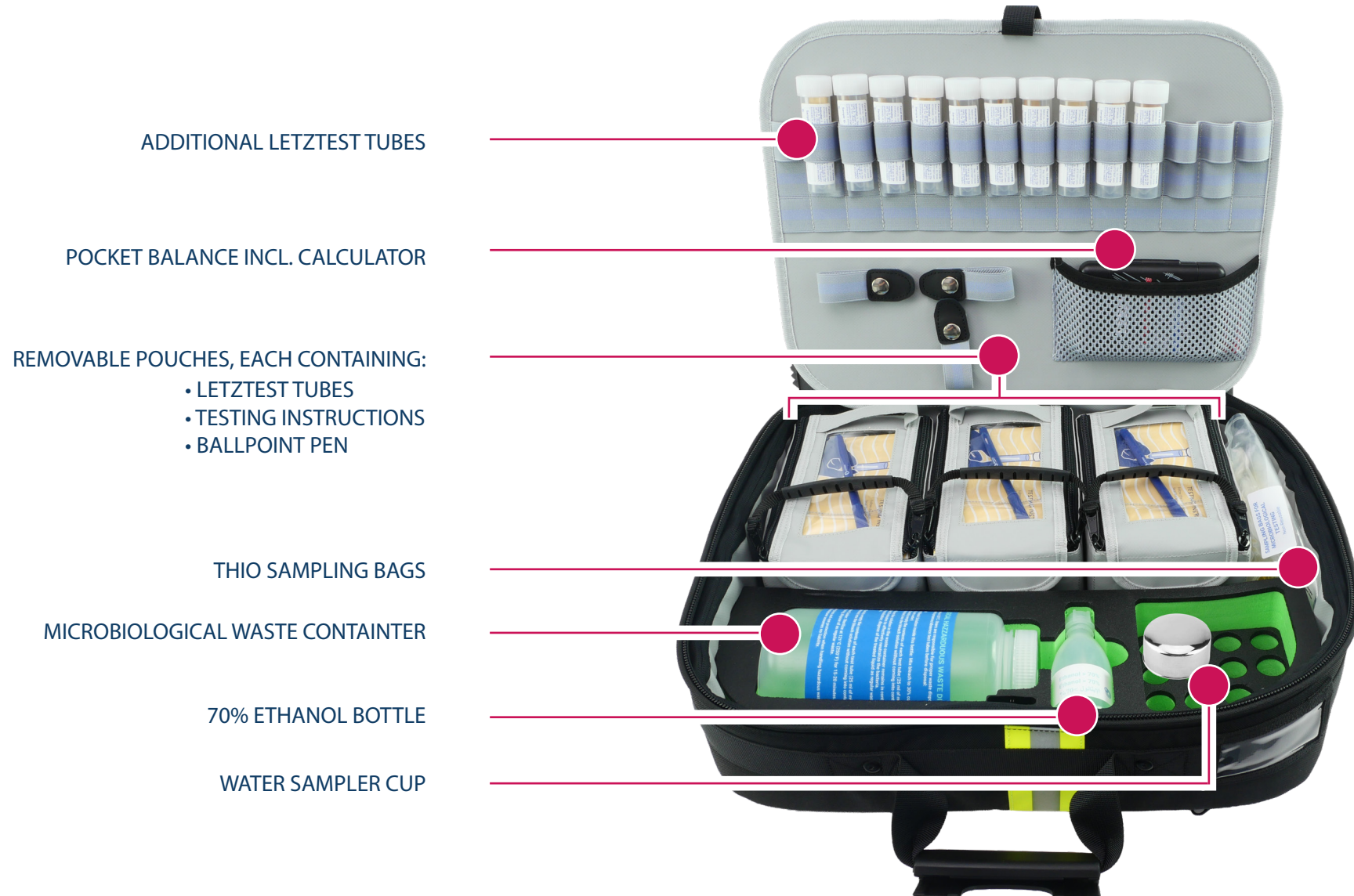
1. OVERVIEW

1.1 SPECIFICATIONS



PRODUCT NAME	LETZTEST WATER CHECKPACK BASIC
Article number	1221
Purpose	Water quality assessment in the first 72 hours of an emergency
Form	High quality emergency response backpack
Material of backpack	Truck tarpaulin, original CORDURA® fabric and 3M™ Scotchlite™ reflective strips
Dimensions	470 × 390 × 300 mm (L × W × H)
Weight	9 kg
HS code	38221900
Selected priority parameters	<ul style="list-style-type: none"> • Presence/ absence of fecal indicator bacteria (incl. <i>E. coli</i>) • Al (Aluminium) • Cl₂ (Chlorine free/ residual) • Cl₂ (Chlorine total) • EC (Electric Conductivity) • F⁻ (Fluoride) • Fe (Iron) • Mn (Manganese) • NO₃⁻ (Nitrate) • pH (Acidity/ Alkalinity) • TDS (Total Dissolved Solids) • Temperature • Turbidity
Optional parameters	> 30+ additional parameters on request (find full list in Tech. Datasheet of Visual Color Comparator Kit)
Number of tests	Standard starter set includes consumables for 100 tests per priority parameter
Data management	Multiple options for data recording by hand
Weather protection	Yes (robust outer shell provides protection from rain, UV exposure, and dust)

1.2 MICROBIOLOGICAL TESTING SECTION



1.2 MICROBIOLOGICAL TESTING SECTION

CONTENT LIST



ITEM	DESCRIPTION/ DETAILS	QTY.
LETZTEST Tubes	Presence/absence test tubes to detect fecal bacteria in water; 25 mL	100 pcs
Removable pouches	Made from robust truck tarpaulin, with viewing window, zipper and magnetically attached in backpack for easy excess (containing the LETZTEST Tubes)	3 pcs
Thio sampling bags	For collecting microbiological samples, which will undergo in-depth analysis in a laboratory; single-use; 118 mL	25 pcs
Microbiological waste container	Wide-mouth; autoclavable; incl. biohazardous waste disposal instructions; 1000 mL	1pc
70% ethanol bottle	For storing 70% ethanol used in microbiological sampling and testing procedures; 100 mL	1pc
Water sampler cup	For collecting water samples; stainless steel; 30 cm length; 150 mL	1pc
Pocket balance	Capacity: 320 g; readability (d): 0.1 g; incl. batteries and calculator	1 pc
Testing instructions	For microbiological testing	3 pcs
Ballpoint pen	For sample identification and labeling of LETZTEST Tubes and general note-taking	3 pcs

1.3 PHYSICO-CHEMICAL TESTING SECTION

TEST REAGENTS &
CONDUCTIVITY CALIBRATION STANDARDS

SAMPLING BAGS

EC | TDS | TEMP – TESTERS

TURBIDITY TUBES

LEITZTEST VISUAL COLOR COMPARATORS

CHEMICAL WASTE CONTAINER

DISTILLED WATER BOTTLE

SAMPLING & MEASUREMENT BEAKERS



1.3 PHYSICO-CHEMICAL TESTING SECTION

CONTENT LIST



ITEM	DESCRIPTION/ DETAILS	QTY.
LETZTEST Visual Color Comparators	Each unit contains: comparator device; 6 different priority parameter-sticks; 25 mL shaker tube; 10 mL plastic syringe (graduated); 3 mL plastic syringe; 10,5 cm stirring rod; cleaning brush; testing instructions for each parameter	3 pcs
Turbidity Tubes	For visual measurement of water turbidity; measurement range: 5–500 NTU	3 pcs
EC TDS Temp. – Testers	Incl. instruction manuel and batteries	3 pcs
Sampling & measurement beakers	Material: PP transparent, screw cap made of PE; shatterproof; stackable; leakproof; for storage or transport of liquids and solids; temperature stability -90 to +100 °C; 60 mL	3 pcs
Conductivity calibration standards	For calibration of EC TDS Temp. – Testers; 1413 $\mu\text{S}/\text{cm}$; each package 20mL	12 pcs
Chemical waste container	Wide-mouth; incl. hazardous chemical waste disposal instructions; 250 mL	1 pc
Distilled water bottle	For storing distilled water; 100 mL	1 pc
Sampling bag	For collecting physico-chemical samples, which will undergo in-depth analysis in a laboratory; singel-use; 118 mL	25 pcs
Aluminium test reagents	Tablet; measurement range: 0.00–0.30 mg/L	100 tests
Chlorine (residual) DPD N°1 test reagents	Tablet; measurement range: 0.0–5.0 mg/L	100 tests
Chlorine (total) DPD N°3 test reagents	Tablet; measurement range: 0.0–5.0 mg/L	100 tests
Iron (LR) test reagents	Tablet; measurement range: 0.00–1.00 mg/L (P) 0.05–1.00 mg/L (VCC)	100 tests
Manganese (LR) test reagents	Powder Pillow; measurement range: 0.20–5.00 mg/L (P) 0.00–5.00 mg/L (VCC)	100 tests
Nitrate test reagents	Powder Pillow; measurement range: 1–100 mg/L (P & VCC)	100 tests
pH-Universal test reagents	Tablet; measurement range: pH 5.0–11.0 (P) ph 4.0–10.0 (VVC)	100 tests

1.4 SUPPORTING TOOLS & DOCUMENT SECTION

A4 NOTEBOOK

- To record data incl. a digital device holder; 1 pc

WORLD HEALTH ORGANISATION GUIDELINES

- *Guidelines for drinking-water quality – Small water supplies*; 1 pc
- *Incl.: Sanitary inspection packages – A supporting tool for the Guidelines for drinking-water quality: small water supplies*; 1 pc



TECHNICAL SUPPORT & DATA-MANAGEMENT SHEETS

- Laminated and rewritable; 1 pc

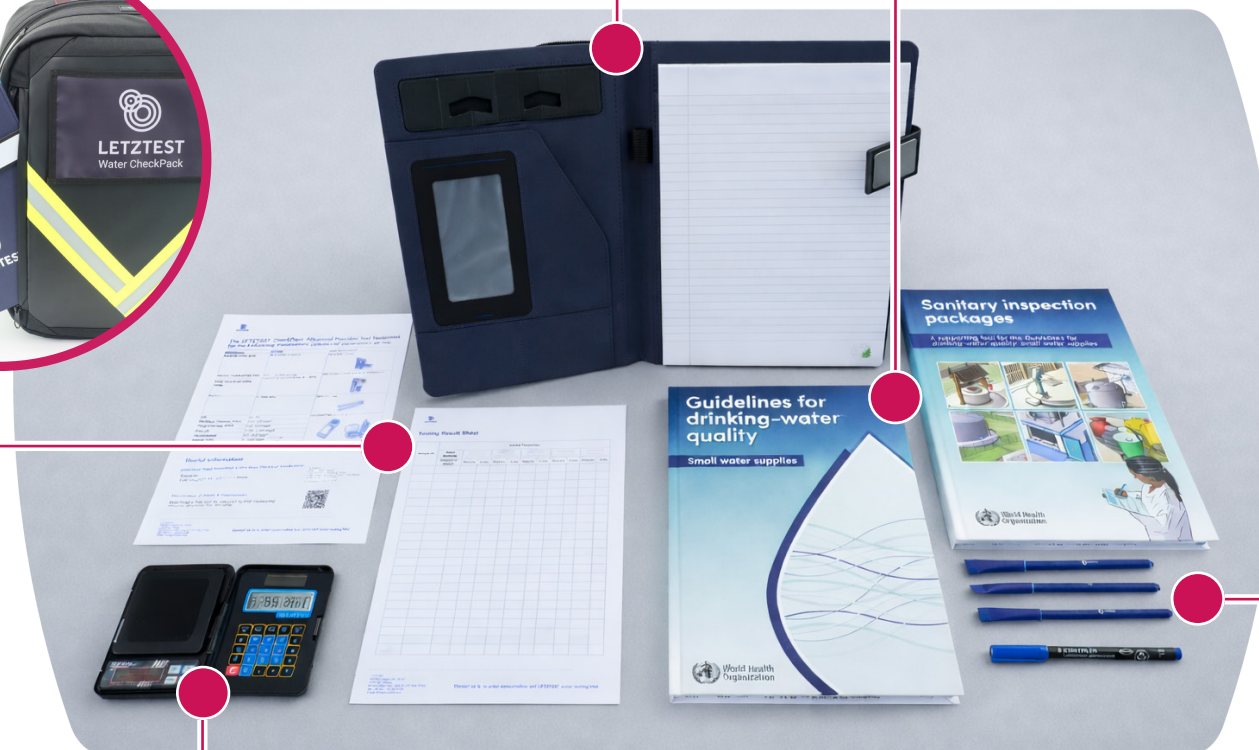


POCKET BALANCE INCL. CALCULATOR

- Capacity: 320 g; readability (d): 0.1 g; 1 pc

PENS

- Ballpoint pen; 3 pcs
- Waterproof pen; 1 pc

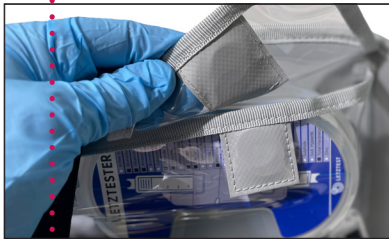


1.5 BACKPACK FEATURES



PRACTICALITY

The self-supporting center divider separates microbiological and physico-chemical testing equipment and allows easy, simultaneous access from both sides.



SPEED

Magnetic mounting points at multiple positions allow equipment to be removed and reinserted quickly.



INTERIOR LAYOUT

Custom-cut foam, elastic loops, and clear pockets keep every item securely in place and well organized.



MATERIAL

Truck tarpaulin, orig. CORDURA® fabric and 3M™ Scotchlite™ reflective strips; all surfaces are easy to clean and disinfect.



PROTECTION & STABILITY

Reflective elements increase visibility, while the heavy-duty two-way zipper and wraparound webbing keep the backpack secure and stable.



HANDLES

Sturdy carrying handles and ergonomic backpack straps ensure comfortable and versatile transport.



FEET

Equipped with eight serrated rubber feet for a stable, protective, and elevated base.



EXTRA STORAGE

A document compartment between the front and inner section plus additional gaps, loops, and slots provide extra storage space.

1.6 DATA MANAGEMENT



The LETZTEST Water CheckPack Basic supports analog data management through durable, reusable documentation materials. Laminated, rewritable sheets allow manual recording of measurement results on site, complemented by a notebook for additional observations. The WHO *guidelines* and the *sanitary inspection packages* provide practical tools for standardized and WHO-compliant data collection.

2. MICROBIOLOGICAL TESTING EQUIPMENT

2.1 LETZTEST TUBES

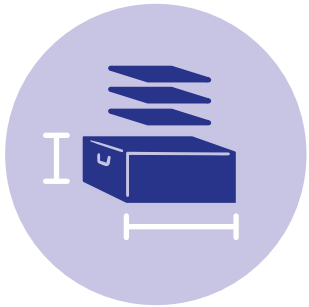


An easy-to-use presence/absence test for detecting fecal bacteria in water samples. This ready-to-use test is ideal for testing drinking water systems in emergency response settings.

The presence of fecal bacteria in water is a clear indication of contamination from human or animal excrement, which carries a high risk of pathogenic microorganisms causing severe waterborne diseases (e.g. Cholera). Monitoring fecal bacteria is crucial to ensure safe drinking water and safeguard public health. According to the World Health Organization (WHO) drinking water guidelines, safe water must not contain any fecal indicator bacteria.

(Reference: WHO Guidelines for Drinking-water Quality, Fourth Edition, 2011, page 36)

SPECIFICATIONS — LETZTEST TUBES



Product Name	LETZTEST Tubes
Purpose	Presence/absence test tubes to detect fecal bacteria in water
Dimensions	90 x 25 mm + lock; 25 mL
Weight	0.009 kg
Form	Dry test strip in PP tube
Sample type	Drinking water; suitable for chlorinated and non-chlorinated water samples
Detects	<i>E. coli</i> (e.g. ATTC 8739), other H ₂ S producing bacteria of fecal origin such as Salmonella and Citrobacter
Detection limit	Test tubes successfully indicate less than 10/ cfu of <i>E. coli</i> (ATTC 8739) in 20 mL test volume
Selectivity	Inhibiting growth of bacteria of non-fecal origin
Incubation	Cultural characteristics observed after an incubation of 15-48 hours at ambient temperature (25°C-38°C); most recommended incubation temperature is 37°C
Disposal	Pour solution into bleach, or incinerate, or autoclave; wear gloves and avoid contact with solution!
Storage	1-30°C; no light
Shelf-life	2 years
Languages	English, French, Spanish

3. PHYSICO-CHEMICAL TESTING EQUIPMENTS

3.1 LETZTEST VISUAL COLOR COMPARATOR

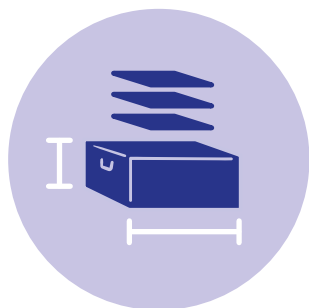


The LETZTEST Water CheckPack Basic includes three LETZTEST Visual Color Comparators, each supplied in a convenient transport box. This setup enables three technicians to carry out parallel testing of multiple water points for physico-chemical parameters when time matters.

The LETZTEST Visual Color Comparators provide simple and reliable access to semi-professional water analysis. Their ergonomic design and high-quality materials ensure easy handling and consistent results.

Using a continuous color scale on interchangeable parameter sticks, measurements are highly precise without the need for intermediate estimation between color blocks. The system allows testing of a wide range of parameters, including Aluminum, Chlorine (free/residual and total), Iron, Manganese, Nitrate, and pH, and can be easily expanded with additional parameter sticks and test reagents.

SPECIFICATIONS — LETZTEST VISUAL COLOR COMPARATOR



Product Name	LETZTEST Visual Color Comparator
Purpose	Visual analysis of physico-chemical water testing parameters using color comparison method
Dimensions	170 x 100 x 50 mm (L x W x H)
Weight	0.194 kg
Form	Visual comparator device with accessories in robust plastic transport unit
Measurable priority parameter measurement range test reagent type (Additional priority parameter-sticks available on request)	<ul style="list-style-type: none"> • Aluminium 0.00–0.30 mg/L tablet reagent • Chlorine free-combined-total (HR) 0.0–5.0 mg/L tablet reagent • Iron (LR) 0.05–1.00 mg/L tablet reagent • Manganese (LR) 0.00–5.00 mg/L powder pillow reagent • Nitrate (HR) 1–100 mg/L powder pillow reagent • pH-Universal pH 4.0–10.0 tablet reagent
Optional parameters	> 30+ additional parameters on request (find full list in Tech. Datasheet of Visual Color Comparator Kit)
Sample volume	Typically 25 mL
Test reagents	Tablet reagents, fast dissolving, no cooling required
Shelf life	Up to 10 years
Power requirement	None
Calibration	Not required
Compatibility	Test reagents compatible with LETZTEST Photometer
Expandability	Additional parameter sticks and test reagents available
Included components in each unit	Comparator device; 6 different priority parameter-sticks; 25 mL shaker tube; 10 mL syringe; 3 mL syringe; stirring rod; cleaning brush; testing instructions for each parameter
Application	Field and laboratory water testing
Storage temperature	Room temperature

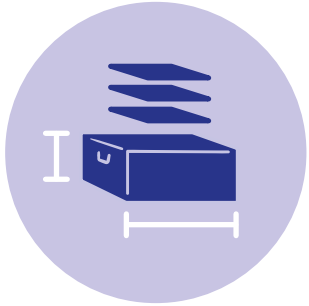
3.2 TURBIDITY TUBE



The LETZTEST Water CheckPack Basic is equipped with three turbidity tubes, enabling three technicians to perform parallel turbidity testing at multiple water points when time matters.

A highly practical and user-friendly tool for visually measuring water turbidity. Turbidity is an essential parameter, for example, prior to water treatment by chlorination in emergency relief settings. Chlorine is an effective disinfectant when water turbidity is below 5 NTU and for ongoing water quality monitoring.

SPECIFICATIONS — TURBIDITY TUBES



Product Name	Turbidity Tubes
Purpose	User-friendly tool for visual measurement of water turbidity
Dimensions	330 x 60 x 25 mm (L x W x H)
Weight	0.2 kg
Form	Plastic tubes
Measurement range	5–500 NTU

3.5 EC | TDS | TEMP – TESTERS



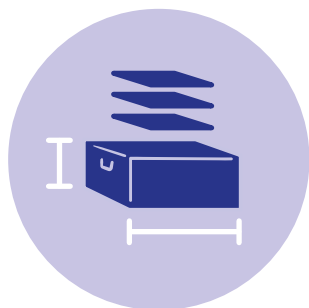
The LETZTEST Water CheckPack Basic is equipped with three EC | TDS | Temp. – Testers enabling three technicians to perform parallel measurements at multiple water points when time matters.

The EC | TDS | Temp. – Testers provide a reliable and user-friendly solution for measuring conductivity (EC), total dissolved solids (TDS), and temperature in water in emergency relief settings. Designed for simplicity and accuracy, they deliver fast results and are suitable for both field and laboratory use.

Durable graphite electrodes minimize polarization effects and ensure stable measurements, while an integrated temperature sensor enables automatic temperature compensation for improved accuracy.

With automatic one-point calibration and a wide measurement range, the testers offer a convenient and efficient way to monitor key water quality parameters without complex setup or maintenance.

SPECIFICATIONS — EC | TDS | TEMP – TESTERS



Product Name	EC TDS Temp. – Tester
Purpose	Measurement of EC, TDS, and Temperature in water
Dimensions	160 × 40 × 17 mm (L x W x H)
Weight	each 0.075 kg
Form	Handheld multi-parameter tester
Parameters	EC, TDS, Temperature
Measurement range	EC: 0–2000 $\mu\text{S}/\text{cm}$; TDS: 0–1000 ppm (approx., depending on conversion factor); Temp.: 0–50 $^{\circ}\text{C}$
Resolution	Resolution 1 $\mu\text{S}/\text{cm}$
Accuracy	$\pm 2\%$ of full scale
Temperature compensation	Automatic
Calibration	1-point (1413 $\mu\text{S}/\text{cm}$)
Electrode type	Graphite electrode
Power supply	CR2032 3V lithium battery
Battery life	Approx. 250 hours continuous use
Incl. components	Protective cap; batteries; instruction manual; conductivity calibration standards 1413 $\mu\text{S}/\text{cm}$, 12 x 20 mL packages; 3 sampling & measurement beakers



4. CONSUMABLES



REFILL CONSUMABLES WITH THE 'CONSUMABLES REFILL BOX BASIC'

ART. NO.	ITEM	MEASUREMENT RANGE/ DETAILS	TO USE WITH/ FOR...	QTY.
1272	Consumables Refill Box Basic	See content list below	LETZTEST Water CheckPack Basic	1 pc

CONSUMABLES INCLUDED INITIALLY IN THE LETZTEST WATER CHECKPACK BASIC – COMPETE CONTENT LIST

ART. NO.	ITEM	MEASUREMENT RANGE/ DETAILS	TO USE WITH/ FOR...	QTY.
116498	LETZTEST Tubes	presence/absence	Microbiological testing	100 pcs
114928	Thio sampling bags	non-reusable; 118 mL	Microbiological testing	25 pcs
1176	Aluminium test reagent	0–0.3 mg/L	Visual Color Comparator	for 100 tests
1167	Chlorine (residual) DPD1 test reagent	0–5.00 mg/L	Visual Color Comparator	for 100 tests
1172	Chlorine (total) DPD 3 test reagent	0–5.00 mg/L	Visual Color Comparator	for 100 tests
1170	Iron (LR) test reagent	0.05–1.00 mg/L	Visual Color Comparator	for 100 tests
1174	Manganese (LR) test reagent	0–5 mg/L	Visual Color Comparator	for 100 tests
1169	Nitrate test reagent	1–100 mg/L	Visual Color Comparator	for 100 tests
1171	pH–Universal test reagent	ph 4–10	Visual Color Comparator	for 100 tests
1270	Conductivity calibration standards	1413 μ S/cm; 20 mL	EC TDS Temp. – Tester	12 pcs
115407	Sampling bags	non-reusable; 118 mL	Physico-chemical testing	25 pcs



TO REFILL CONSUMABLES YOU CAN ORDER THE '**CONSUMABLES REFILL BOX BASIC**':



ART. NO.	ITEM	MEASUREMENT RANGE/ DETAILS	FORM	QTY.
1274	Consumables Refill Box Basic	see content list below	cardboard box	1 pc

CONTENTS OF '**CONSUMABLES REFILL BOX BASIC**' AND INITIAL CONTENTS OF **LETZTEST WATER CHECKPACK BASIC**:

ART. NO.	ITEM	MEASUREMENT RANGE/ DETAILS	FORM	QTY.
116498	LETZTEST Tubes	presence/absence	plastic test tubes	100 pcs
114928	Thio sampling bags	non-reusable; 118 mL	plastic bags	25 pcs
1176	Aluminium test reagents	0.00–0.30 mg/L (P & VVC)*	tablets	for 100 tests
1167	Chlorine (residual) DPD N°1 test reagent	0.00–8.00 mg/L (P)* 0.0–5.0 mg/L (VCC)	tablets	for 100 tests
1172	Chlorine (total) DPD N°3 test reagent	0.00–8.00 mg/L (P) 0.0–5.0 mg/L	tablets	for 100 tests
1170	Iron (LR) test reagent	0.05–1.00 mg/L	tablets	for 100 tests
1174	Manganese (LR) test reagent	0.00–5.00 mg/L	powder pillow	for 100 tests
1169	Nitrate (HR) test reagent	1–100 mg/L	powder pillow	for 100 tests
1171	pH-Universal test reagent	pH 4–10	tablet reagent	for 100 tests
1270	Conductivity calibration standards	1413 μ S/cm; 20 mL (for EC TDS Temp. – Tester)	liquids	12 pcs
115407	Sampling bags	non-reusable; 118 mL	plastic bags	25 pcs

5. GENERAL INFORMATION

5.1 SPECIAL ADVANTAGES



TEAM-READY

Designed for simultaneous use by up to three technicians. One operates directly at the backpack while two deploy to additional sampling points in the field, enabling efficient teamwork and faster coverage.



LONG-TERM & ROBUST

Engineered for demanding environments and built to last. The durable backpack and precision foam inserts protect all components during transport and use. Developed as a sustainable solution, not a disposable kit, with every component individually replaceable and reorderable.



EASY-TO-USE

Designed for intuitive, user-friendly operation in the field. Fully mobile and independent from power supply, allowing use anywhere. Simple procedures ensure fast deployment without the need for complex training or technical expertise.



ALL-IN-ONE SOLUTION

A complete field solution developed with emergency relief experts: equipment, consumables, instructions, documentation, and disposal. Everything essential, fully mobile and self-contained.

* Teams on the ground making a difference. Thanks to the people of © Malteser International for sharing these moments from their deployment in Mozambique.

5.2 SUPPORT

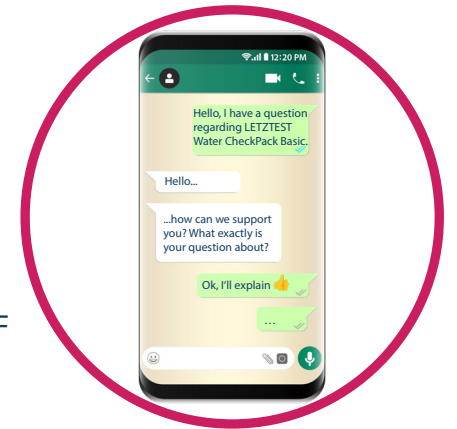
FIND QR-CODE IN THE PRODUCT THAT LEADS TO...



PRE-RECORDED VIDEO-TUTORIALS



DIRECT WHATSAPP SUPPORT CHAT WITH LETZTEST TECHNICAL STAFF



ONLINE SUPPORT TRAINING WITH LETZTEST TECHNICAL STAFF



5.3 CONTACT



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