TROLEX

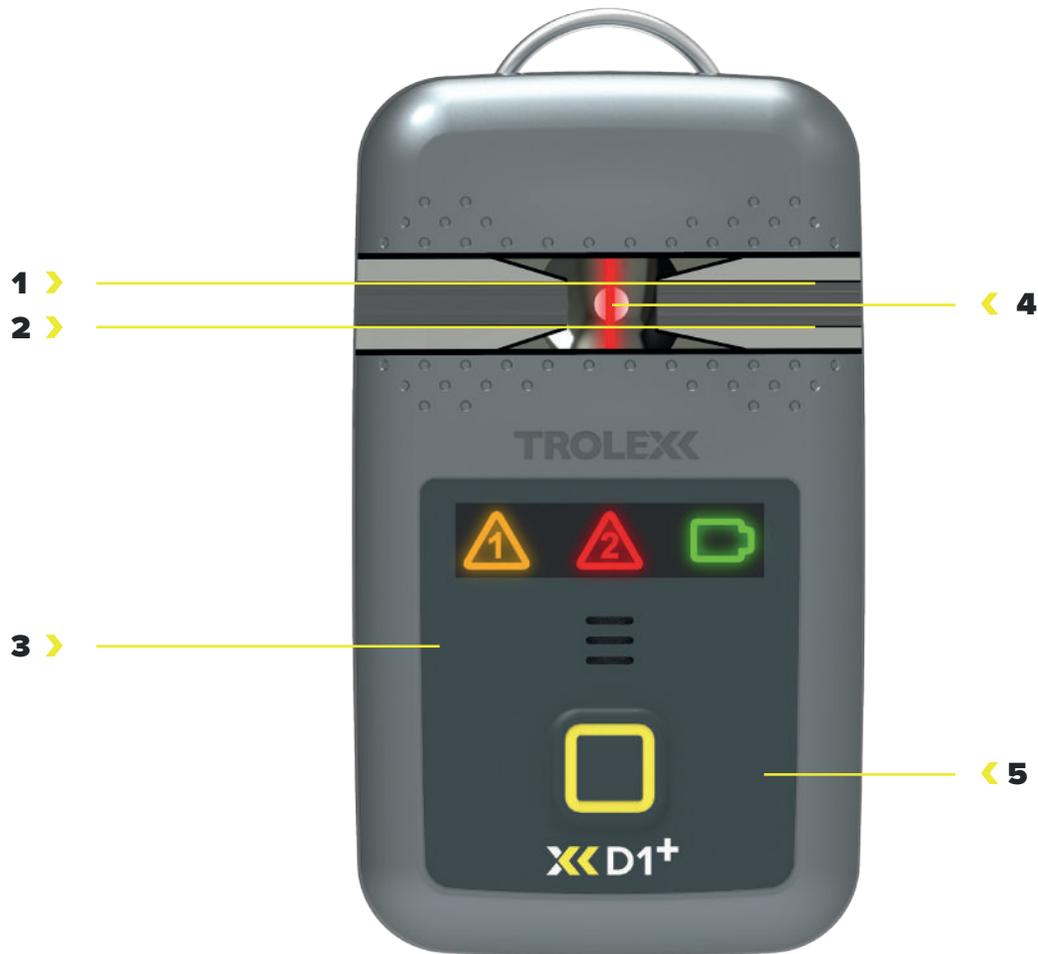# ONE LIFE.
PROTECT IT.

XD1+

**PERSONAL
DUST
MONITOR**

PIONEERING TECHNOLOGY MADE SIMPLE.

1 ❯ Open-path particulate technology allows free flow of air through the unit and gives **XD1⁺** its incredible accuracy and durability; whether it's detecting microscopic but dangerous particulates or in heavy dust-loaded environments.

2 ❯ No pump, no pre-filtering, no impactor. **XD1⁺** detects the real content of particulates in the space, constantly monitoring for dangerous particle sizes in real time.

3 ❯ Advanced processing algorithm, detects, counts and sizes up to 100,000 particulates a minute, providing accurate real-time information to save lives.

4 ❯ Optically refined detection chamber allows **XD1⁺** to monitor every particle that flows through the unit.

5 ❯ Bluetooth connectivity and RFID pairing, and data docking make downloading and visualising your particulate data easy.
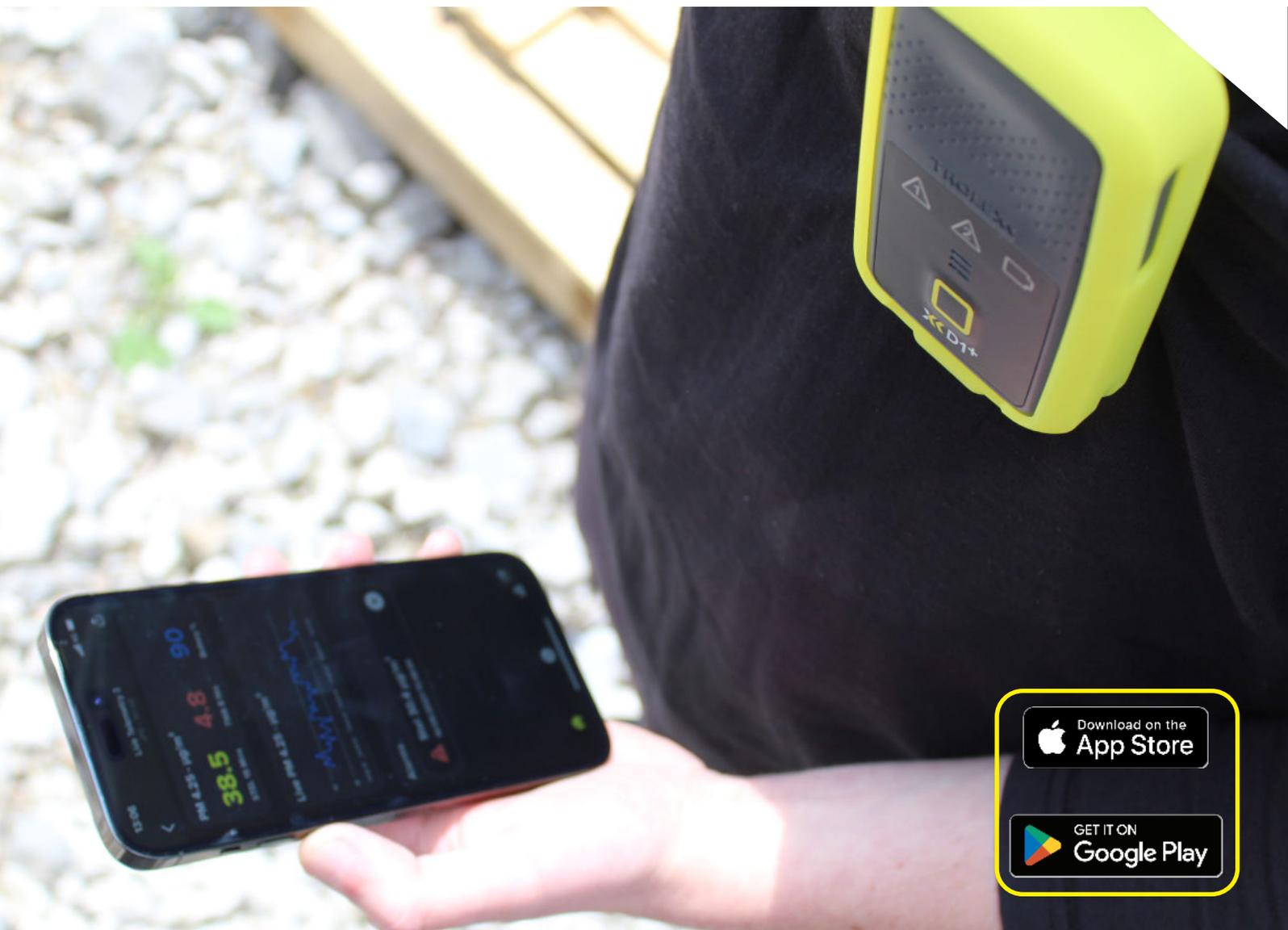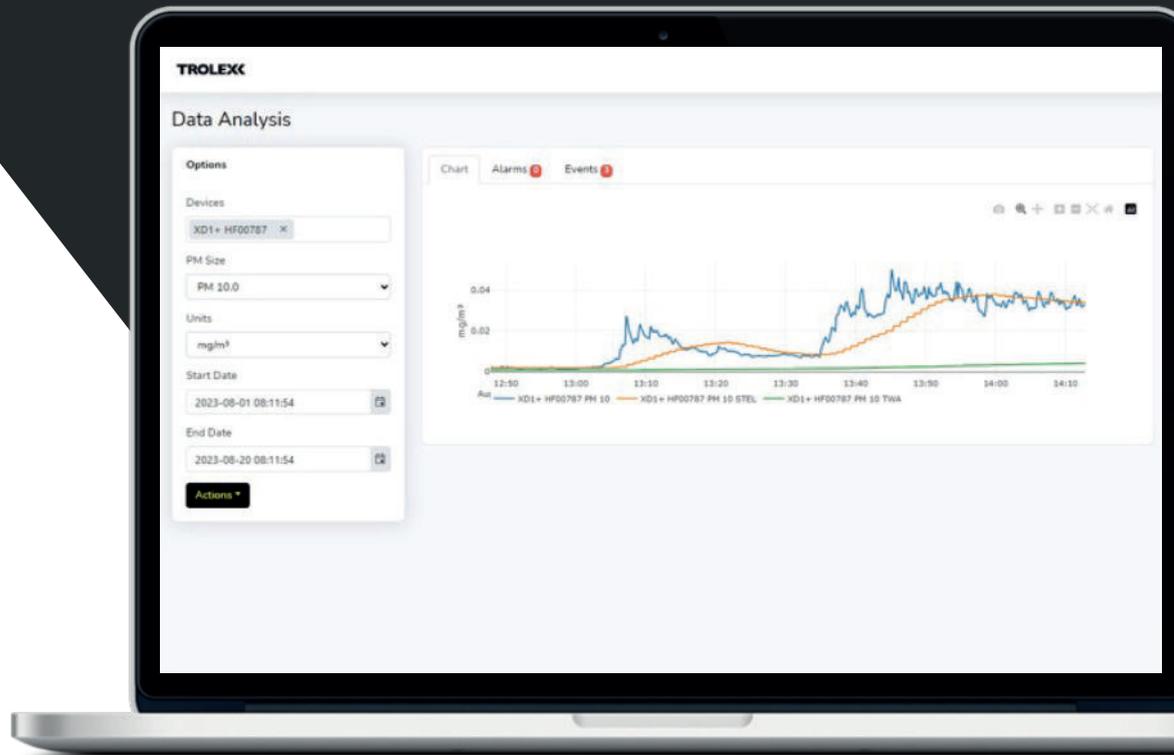
BREATHEMOBILE APP.

We develop products that help you make a difference and keep your workforce safe.

Want the data live on screen? Simply connect **XKD1⁺** using NFC technology by holding your **BreatheMOBILE** app close to your **XKD1⁺**.

View your live and historic data, change your threshold settings and see any alarms. "Real-time" really is in real time with **XKD1⁺**.

With personal real-time data delivered directly to your mobile phone, you can instantly identify the source of exposures and adjust control-measures immediately. You can provide the correct PPE to those who need it, as well as record and store who, when and where of your dust exposure scenario.

trolex.com/software

BREATHELITE SOFTWARE.

Like the **XD1⁺**, **BreatheLITE** software is designed to make things simple.

BreatheLITE gives fast access to live and historical data. It allows you to easily configure your **XD1⁺** devices, and controls the simple compliance check in around 2 minutes.

It's software the way it is meant to be. Fast, intuitive and straightforward.

Got more than one device? No problem. With the **XD1⁺** data and charging dock, download the data to your PC or laptop while charging so your data is ready for you to view when it suits you.

PRODUCT SPECIFICATION.

TECHNICAL SPECIFICATION

Sensing technology	OPC light-scatter photometer
Particulate measurement	0.1 μm to 10 μm (PM1, PM2.5, PM4.25, PM10)
Particle count accuracy	±10%
Operating temperature Optimum performance Maximum performance	 10 °C to 40 °C -10 °C to 50 °C
Humidity Optimum performance Maximum performance	 20% - 80% RH, non-condensing 0% - 95% RH, non-condensing
Housing material	PC/ABS polymer housing
Ingress protection	Main enclosure: IPX4 Particle flow path: IP4X
Weight	170 g
Data connections	USB-C connector (charging and data transfer) Bluetooth LE 5.3
Connectivity	**BreatheLITE** PC application **BreatheMOBILE** application
User options	STEL and TWA alarm setpoints Latching alarms Particulate measurement
Operating range	Up to ~150 mg/m^3
Particulate density range	0.8 g/ml to 8.0 g/ml (default 1.65 g/ml)
Units of measurement	μg/m^3 – Logged on device μg/m^3 or mg/m^3 – **BreatheLITE** application
Sampling interval	Custom 1 second intervals (default 10 seconds)
Flow rate	0.1 L/min
User interface/alarms	Visual icon illumination (STEL, TWA, battery indication) Audible (85 dB) Vibration alert
Self-test	Sensor hardware, circuitry and battery test on activation 'Push to test' during operation
Response test	Custom particle compliance test
Battery capacity	8.2 Wh lithium ion
Battery run time	16 hours (full health at ambient)
Charging temperature limits	0 °C to 45 °C
Charging time	0% to 90%: 2 hours 0% to 100%: 3 hours
Max. charge current	1.5 A
Memory capacity	1 GB (6 months data logging at 10 second intervals)
Product fixing/body mounting	Personal mounting clip, Klick Fast stud options
Certification	UKCA and CE compliant

ORDER REFERENCE.

XD1⁺ Personal Dust Monitor

With alligator clip   **TX8061.00.01**

Alligator clip.

XD1⁺ Personal Dust Monitor Team Pack

5 x XD1⁺ devices   **TX8061.00.10**
with charging and
data dock

XD1⁺ Team Pack comes with a free charging and
data dock.

XD1⁺ in charging dock.

XD1⁺ Protective Case

XD1⁺ protective case   P5650.4002

Protective case.

ORDER REFERENCE.

XⱭD1⁺ Charging and Data Dock

Data and charging dock   **P5650.4001**

Data and charging dock only.

Charging and data dock.

Product Mounting Kits

The **XⱭD1⁺** mounting kits allow for Klick Fast, location and removal of the device for a range of custom mounting applications.

Body mount kit contents

Body mount kit   **P5644.4001**

Site clothing or belt mounts.

Klick Fast   Belt loop dock.   Sew-on dock.

Wall / pole mount kit   **P5644.4002**

Direct wall mounting, poles or structures.

Wall/pole mount kit contents

Pole mount.   Wall mount.

ORDER REFERENCE.

Compliance Pack[+]

Compliance Pack[+]   P5650.4000

Annual compliance kit includes:

4 x dust samples
1 x hood
1 x compliance base

Trolex Compliance Pack[+]

Sample Replacement Pack

Sample replacement   P5644.4004 pack

Intended for the Team Pack and / or bulk users. Contains:

12 x replacement compliance samples.

x 12 Trolex compliance sample.

At Trolex, we save lives.

We believe that no person should risk their life to earn a living.

We aim to become the world's leading name in health and safety technology through pioneering products that provide real-world benefits to our customers whenever workers operate in hazardous environments.

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XD1+_Technical Brochure_
P5650.1601_Rev C