



TROLEX

HOW XD1⁺ IS INTEGRATED WITH THE REACTEC ECOSYSTEM

Workers are 100 times more likely to die from an occupational disease over a workplace accident.

Despite many workers' prolonged exposure to harmful occupational dust increasing the chance of developing lung disease, it is possible to protect workers from life-threatening exposure.

We're excited to bring to the market our **XD1⁺ Personal Dust Monitor** as a connected dust monitor with Reactec's robust workplace wearables and cloud-based analytics. By leveraging revolutionary real-time personal monitoring technology with location tracking, automatic data collection and powerful data analytics, employers can now control their worker's exposure to harmful respirable dust like never before and reduce these harrowing statistics.

Our **XD1⁺ Personal Dust Monitor** can be easily connected with the Reactec Ecosystem, which collects and contextualises all the raw dust data the **XD1⁺** picks up. The Reactec Ecosystem for workplace exposure to hazards includes an IoT gateway, RASOR for secure data transmission, an RFID identity card to personalise the collected dust data and the cloud based Reactec Analytics software for

informative and automatic data dissemination.

RASOR is a communications gateway with integrated SIM and GPS technology to gather data seamlessly from the **XD1⁺** and present it live, personalised and position tracked data to remote line managers via a browser. The RFID identity cards allocate an **XD1⁺** to specific users giving traceability of use and sharing of devices.



1. Setting up your account.

As a business, you'll need an account for the Reactec Analytics software to access the data. All the data from your **XD1+** is aggregated within Reactec's Analytics cloud software and is accessible to all the relevant personnel within your business who require it.

An account for the Reactec Analytics software can have an unlimited number of users; simply contact support@reactec.com to confirm your account details and any existing account administrators.



2. Assigning an XD1+ a specific worker.

There are two modes of operation to assign workers to an **XD1+** using a Reactec RASOR.

One-to-One assigns a single RASOR to a worker using the worker's ID card. RASOR is then paired with a single **XD1+**. One-to-One mode allows personalised dust exposure to be gathered for individual workers, so that workers can take the RASOR into the field and have their data available live and location tracked.

One-to-Many (configured in 'HUB' mode) is used to pair a number of **XD1+** devices to multiple operators and individual workers. The RASOR remains at a fixed location and only collects live data if an **XD1+** is nearby.





ONE-TO-ONE MODE SETUP

Remove RASOR from charger and check that the dust icon is present to show that dust mode is enabled.

Press the right-hand button to assign RASOR and present RFID card on top of RASOR, until it beeps. The assigned RFID card name will appear on the RASOR.

Turn on **XD1+** and ensure it is ready for use; the **XD1+** will beep when it is turned on. Press the left-hand button on RASOR to initiate RFID scan and pairing of **XD1+** to RASOR. Place Trolex logo on the **XD1+** unit on top of RASOR logo to allow for reading of internal RFID tag on **XD1+**.

The RASOR device will beep to confirm successful pairing.



In order to view live data on RASOR, you can enter the main menu by pressing right button and scrolling to dust icon. Press the left button and you can now view live data. At the end of the day/shift, return the RASOR to the charging station press the left-hand button of RASOR to log-off. This will retrieve end of day file with all relevant data on.





ONE-TO-MANY MODE SETUP

RASOR must be assigned to “HUB” mode via Reactec Analytics.

1. In the ‘Analytics’ dashboard, click ‘Data/Project Manager’ in the top-right corner, then click ‘RASOR & 3rd Party Devices’ in the ‘Asset Admin’ section on the right-hand side. Select ‘edit’ on the specific RASOR device you are using. Click ‘Hub’ mode.
2. For each **XD1+** you want to assign to a worker you will require an RFID identity card for that worker, as well as an **XD1+** unit; switch on the XD1+ and ensure it is ready for use.
3. Press right hand button on RASOR named ‘Sensors’ to choose the device that you wish to connect. Select dust icon. Select left-hand button ‘Assign’ to commence the pairing process.
4. Follow prompt to place Trollex logo on **XD1+** unit on top of RASOR logo to allow for reading of internal RFID tag on **XD1+** (whilst ensuring RASOR is in the dock). RASOR will confirm **XD1+** is paired with ‘Trollex tag read’ appearing

and instruct you to place RFID card against the RASOR to perform the personalisation.

The RASOR device will beep to confirm successful pairing.



Once a shift with **XD1+** is completed, on RASOR select ‘Sensors’, ‘Dust’ and ‘LOG OFF’. You’ll then be asked to present ID card to confirm end of session and collect end of day data.

3. Analysing the data.

Reactec's Analytics software is the heart of Reactec's ecosystem, where managers and team leaders can view a wide variety of online Analytics reports 24/7 and on demand to be informed of their employee monitored risk data.

Supervisors can view dust exposure levels within their operating environment in Reactec Analytics by navigating to the 'Dust' tab on the main menu and choosing from a variety of reports including:

- "Operator Average Dust Exposure"
- "Operator Dust Exposure Analysis"
- "Workforce Daily Dust Exposure"

Just an internet connection and computer are needed to access these online reports, whether working from a head office or remote locations. Additionally, let Reactec Analytics handle the workload by sending automatic email alerts for high-risk events and customise the frequency of selected KPI reports delivered via email. Maintain full control over GDPR responsibilities with a robust administration structure managing access to all employee data which turns dust exposure data from your **XD1+** into actionable intelligence giving you the ability to find information that matters to your business.

