OSAT

ONSITE ANALYTICS TOOL

Waste Metering System
Technical Specifications & Installation Details

OSAT Waste Metering System

THE ONSITE ANALYTICS TOOL (OSAT) is a waste metering system designed to aide waste data capture within buildings and automate the transmission, consolidation and communication of that data from building back-of-house operations to the relevant stakeholders via a cloud-based database and dashboard environment.

The OSAT consists of platform scales, an integrated RFID scanner and a touchscreen interface. With the addition of our proprietary operating software within the touchscreen interface, the OSAT enables the user to capture detailed information about each bin in a completely automated process. The user will be required to simply roll the bin onto the scale where it will be scanned – the level of granularity and automation is driven by the client's site specific requirements and can be tailored to deliver the desired outputs. The flexibility of the system enables the following information to be captured:

- Identification and data collection of the material weight of each bin

- Identification of the bin size

- Identification of waste stream type (landfill, paper, organics etc.)

- Bin location (tenancy, floor, retail food court etc.)

Once the bin has been scanned, the user will be prompted to visually assess whether or not the bin is contaminated to ensure the weight data is correctly attributed to the appropriate stream i.e. recycling or landfill. This also serves as a built-in due diligence measure and provides insight into which tenants are contaminating their recycling bins. Once the user has confirmed their selection (clean or contaminated) the data will be logged for the individual bin and the process will begin again for the next bin – the entire process takes approximately 7 seconds.

The weighing indicator, RFID scanner and the touchscreen PC are housed with the mounting plate which is mounted to the wall with 6 screw points (hardware dependent on wall - installation specifics to be confirmed at preliminary site visit)

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OSAT Features

1. INDUSTRIAL TOUCHSCREEN PC

Connectivity	3G / LTE Modem
User Interface	10" LCD touch screen panel
Storage	Capacity for over 1 million transactions
Transaction time	5 sec of user interaction time per bin
Power	230V 80W Maximum

2. WEIGHING INDICATOR

Model	IND236 Digital Indicator
Capability	Four 350Ω load cells
Trade Approval	Can be calibrated for NMI approval
Power	230V 80W maximum

3. RFID SCANNER

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Power	Adjustable 1-30dB
Antenna	6dBi directional panel antenna
Frequency	860-960MHz
Tags	UHF Gen2+

4. SITE POWER REQUIREMENTS

1x Double weather proof IP53 250V - 10amp outlet - location to be determined after preliminary site visit

5. INDUSTRIAL PLATFORM SCALES

Dimensions (mm)	1386 (w) x 1500 (d) inc.300 mm ramp (can be configured with two ramps)
Platform height	35-45mm
Load Capacity	1500Kg
Precision	0.01Kg
Load Cells	4x500Kg IP-68 rated, hermetically sealed stainless steel

Reporting Dashboard
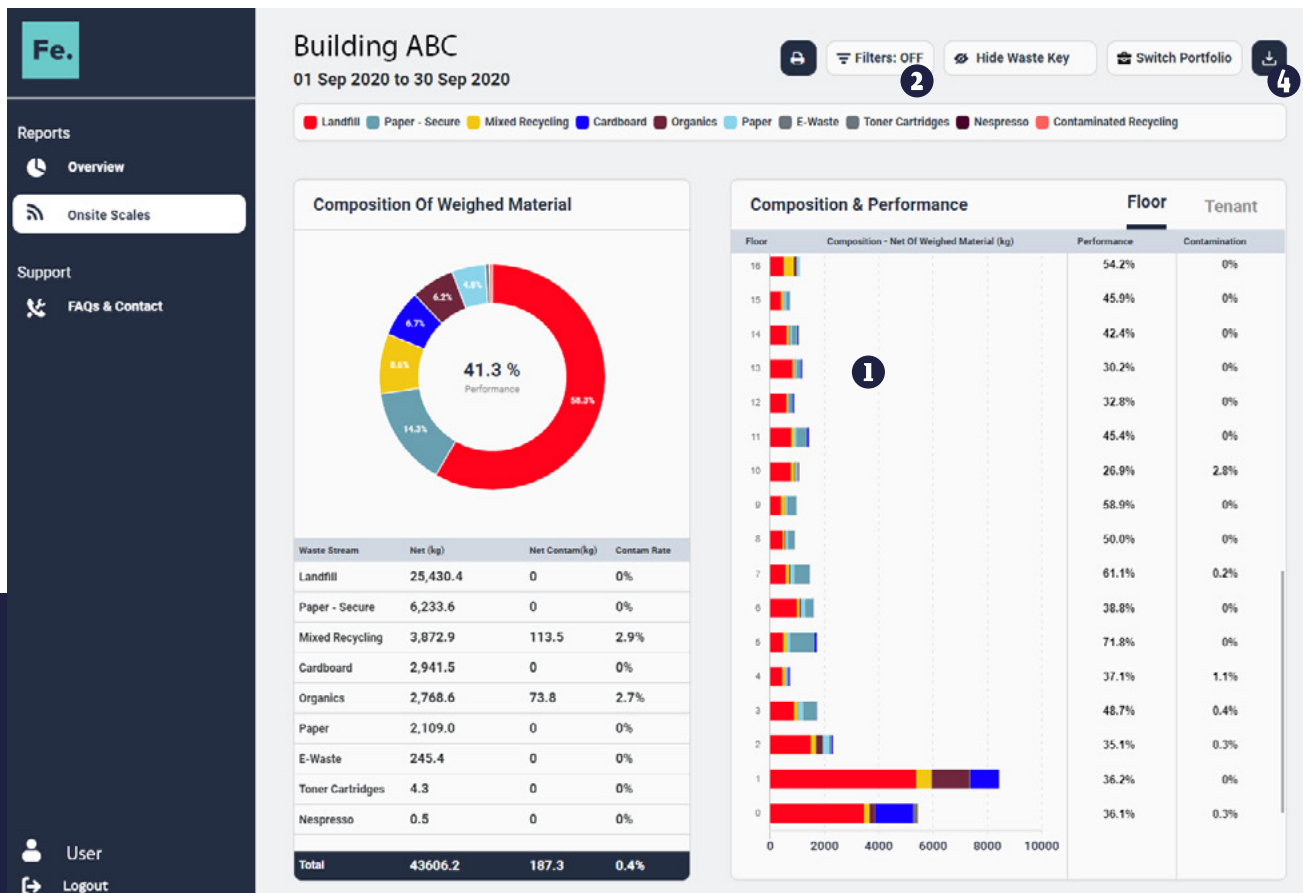
The reporting dashboard displays live visualisations of all transactional data weighed over the scale. Multiple logins can be provided for all relevant stakeholders - giving direct operational/performance insight to those that need it. The features shown above and below are only a selection of the dashboard functionality.

1. LEVEL-BY-LEVEL REPORTING
Dynamic Visuals - Composition breakdown, recycling performance and contamiantion.

2. FILTER BY AREA
Isolate areas, drill down for more detail.

3. PERFORMANCE SNAPSHOT
Performance at a glance, total kilograms and contamination by stream - dynamic visuals based on filter selection i.e. area/level/whole building.

4. EXPORT
Detailed data file - excel file export of raw transactional dataset.

PDF Snapshot Report - mirrors what is shown on screen, good for emailing/reporting to stakeholders.