

PlasTell

Plastics sorting made simple

Post-consumer waste plastic can comprise numerous types of visually identical but chemically different plastics and polymers, meaning that they are nearly impossible to differentiate with the naked eye alone. How do you enable your waste sorters to identify and sort common plastics without resorting to expensive automatic sorting lines?

PlasTell is your complete plastics identification solution.



■ Rapid

A scan takes less than 2 seconds

■ Cloud-enabled

Gain extra insight into your data

■ Versatile

Identify major plastic types, and add your own specialty polymers



With PlasTell, you can make use of laboratory standard infrared analysis techniques and cutting-edge machine learning algorithms, all in a desktop package that doesn't need a PhD in chemistry to be operated.

In seconds, your PlasTell equipped workers will easily and reliably differentiate between common types of plastic. You can control your PlasTell from either the simple physical interface or with a dedicated mobile app, which also allows you to access advanced analytics and data tools to help better understand the plastic you process.

PlasTell is designed to be simple, rugged and easy to use. You can power it via mains electricity, or, for added portability, using an optional external power bank. Our patent-pending sensor system means that the sample only has to be placed on the sensor briefly to be measured.

We can customise our platform to help deliver your plastics identification needs.

Contact us now to see how we can work together!

Preliminary technical specifications

Measurement Principle

Combined near-infrared transmittance and reflectance spectroscopy, operating in a band in the 1-2 μm region.

Two built-in infrared lamps, expected life > 40 000 hours. Infrared fingerprints are measured with our patent-pending optical sensor and identified with our proprietary machine learning algorithms.

Plastics supported

Most common plastics (PET, PVC, PE, PP, PS and more). Specialist plastics or polymers can be added upon request.

Please note that PlasTell is unable to identify black plastics.

Accuracy

Predicted > 90-95%, to be confirmed in currently ongoing testing.

Measurement time

Between 0.5 and 2 seconds depending on signal quality.

Power

Standard power consumption 5W. Typically powered from mains (power cable included). Can also be powered from an optional external battery pack. Internal batteries can be included upon request.

Footprint

13×13×20cm, 0.8kg.

Connectivity

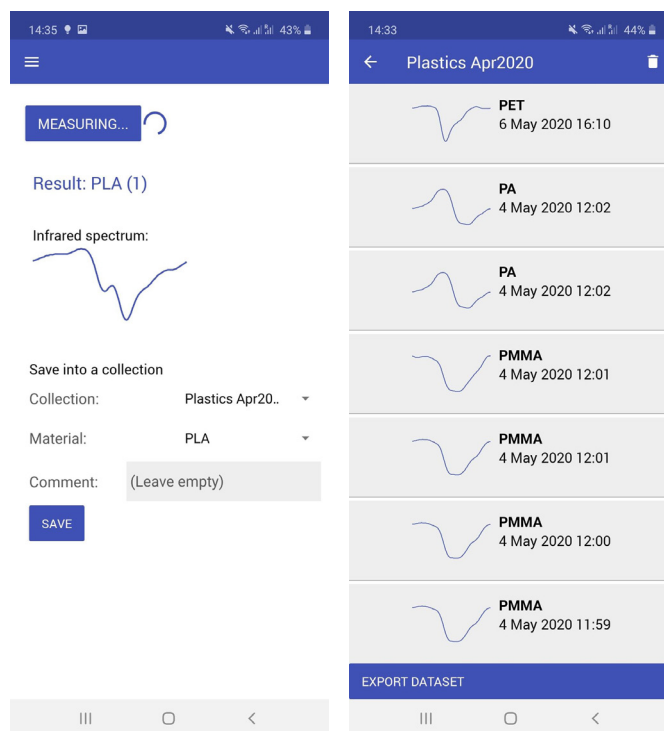
Wi-Fi (2.4GHz) for cloud connectivity and over-the-air firmware updates, Bluetooth LE for smartphone interfacing.

Warranty

One year as standard.

Mobile application

Our free app for iOS and Android can be used to configure the instrument as well as save and analyse data.



To order your PlasTell, get in touch now at hello@matoha.com!