Cobalt Insight200M by Agilent—the Ideal Scanner for Liquids, Aerosols, and Gels at Airports with Less Than 500,000 Passengers

All Airports Following EU Security Regulations Must Screen Liquids Using Approved Scanning Systems

Commission Implementing Decision 2013/2045/EU of 17 April 2013 amending Commission Decision C(2010) 774 regarding screening of liquids, aerosols, and gels at EU airports requires that all airports must screen liquids using approved equipment. Since December 2016, this includes airports with less than 500,000 passenger movements.

Benefits for Small Airports

- Low false alarm rate
- Reduced footprint
- High reliability
- Minimal training
- Fast and easy screening
- Type A mode leading to near-zero residual alarm rate
- Future proof—compatible with Type C and EDSCB
**Insight200M—Building on the Solid Foundations of the Insight100 and Perfect for Smaller Airports**

The Insight200M is compact, fast, and easy to use, making it ideal for small airports. It is the best-performing liquid explosive detection system (LEDS) available, having met and exceeded the requirements for ECAC Standard 3 (the most stringent requirement).

The Insight200M has the lowest false alarm rates of any LEDS, and has an optional Type A mode, which allows any alarms that do occur to be resolved. This results in a low incidence of burdensome alarm resolution protocols being implemented.

The Insight200M takes and builds on the technology used in its predecessor, the Insight100. Insight systems have been in use in over 70 EU airports, including most of the busiest airports, since liquid screening requirements started in early 2014. Insight systems have high reliability (MTBF >30,000 hours and availability >99.7%) and exceptionally low operational false alarms rates (<2 % for all containers). The Insight200M is considerably lighter and more compact than its predecessor, weighing only 25 kg, with dimensions of 562 mm (width), 536 mm (height), and 417 mm (depth).

**Insight200M—Highly Accurate Screening—Complementary Detection Technologies**

The Insight200M can screen all container types within five seconds. The system uses a gravimetric sensor to screen metal containers. All other containers are screened using the highly accurate, and material-specific, spatially offset Raman spectroscopy (SORS) technique pioneered by Agilent (formerly Cobalt Light Systems). SORS (Figure 1) enables exceptional detection, has a negligible false alarm rate, and specifically identifies any threats present. The combination is a liquid explosive detection system that demonstrates the best detection and the lowest false alarm rates in all independent tests including official evaluations. Other manufacturers’ systems typically have operational false alarm rates up to 10-times (or more) higher.

The Insight200M is simple to use, and requires minimal training. It complements other screening technologies such as Type C and EDS for Cabin Baggage perfectly, providing a future-proof solution for future phases of liquid screening. Any alarms that occur can easily be resolved by decanting a small amount from the alarming container into a vial, and using the Type A mode approved by ECAC (Figure 2). The residual alarm rate of combined Type B and Type A measurements is almost zero.

![Chemical fingerprint](image1)

**Figure 1.** Spatially offset Raman spectroscopy (SORS).

![ECAC Standard 3 Type A kit available](image2)

**Figure 2.** ECAC Standard 3 Type A kit available.