

Identify Threats with Confidence – Agilent Insight Series Alarm Resolution Systems



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New Insight Series, same trusted reliability

The new Agilent Insight Series are rapid, easy-to-use alarm resolution systems that solve today's alarms, with easy upgrades available for tomorrow's alarms. The new additions include the Agilent Insight300M and the Agilent InsightBLS: the Insight300M is designed for compliance with EDSCB regulations and the InsightBLS is designed for compliance with TSA regulations. This application brief focuses on the use of the Insight300M to meet current and future regulatory requirements.

Benefits to airports

- Low false alarm rate—fewer escalations
- Highly reliable
- Minimal training
- Fast and easy screening
- Specifically identifies threats
- C3, C4, and C4 limited compatible
- Future proof—evolves with changing regulations
- Identifies potential false negatives without operator input
- Scans up to 5 L containers

Insight300M-new capabilities

The Insight300M alarm resolution system remains compact, fast, and easy to use. It builds on the technology used in its predecessor, the Insight200M, which met and exceeded the requirements for ECAC Liquid Explosives Detection System (LEDS) Standard 3. The Insight300M is perfect for resolving alarms arising from computed tomography X-ray systems and can easily scan volumes of 2 L and up to 5 L.

Insight systems are known for their low false alarm rate. Algorithm changes to the Insight300M reduces this further and improves accuracy in identifying threats. An optional Type A mode for resolution is available (Figure 1) if further analysis is required. This results in a low incidence of burdensome alarm resolution protocols being implemented.



Additionally, new built-in technology identifies potential false negatives without any need for operator assessment. This feature advises if the container can be screened without burdening the operator with additional training.

Since the introduction of liquid regulations in 2014, Insight systems have been deployed globally, with over 1,000 systems in use. The Insight300M maintains a compact design, weighing only 25 kg, with dimensions of 562 mm (width), 538 mm (height), and 422 mm (depth).

Insight300M-highly accurate screening

The Insight300M can screen all container types within 10 seconds using multisensing technology. All nonmetallic containers are screened using the highly accurate, material-specific, and proprietary spatially offset Raman spectroscopy (SORS) technique pioneered by Agilent (Figure 1).

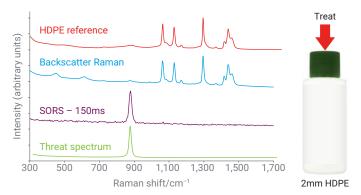


Figure 1. Agilent-pioneered technology, spatially offset Raman spectroscopy (SORS), screens through barriers.

SORS enables through-barrier detection to identify the threat present specifically. The algorithm design enables the Insight300M to respond quickly to changes in the threat landscape and be easily upgraded without affecting existing capabilities.

The Insight300M is compatible with future regulations for identifying solids, powders, pastes, and suspensions with the same level of accuracy as liquids. This can be achieved with a capability software upgrade and a minor change to operator training, without the requirement for hardware reinvestment.

Any alarms can be easily resolved by decanting a small amount from the alarming container into a vial and using the Type A mode (Figure 2).



Figure 2. (A) Type A kit for further alarm resolution. (B) The holder snaps into place.

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The fast, easy, and accurate operation of the Agilent Insight Series reduces airport operational costs without compromising safety. The Agilent Insight300M extends this to emerging threats and regulation changes, reducing the need to replace equipment, and lower long-term cost of ownership.



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