

SDX 10060 XD_i

Utilising innovative X-ray Diffraction technology for superior material analysis



Feature Highlights

- Exceptional material specific detection, including homemade explosives
- Increased efficiency thanks to automated resolution for vast majority of alarms
- Overall FAR significantly reduced
- Reducing the human factor, while decreasing operational costs
- Future proof detection – algorithms extend scope
- Accurate and adaptable identification of narcotics and other contrabands

Compliance

- The SDX 10060 XD_i was designed to meet ECAC Standard 3.1/3.2 and TSA 7.2 plus future regulations. Certification is underway.

Elevated standards of detection

Leveraging the latest X-ray Diffraction (XRD) technology, the ground-breaking Smiths Detection SDX 10060 XD_i offers highly accurate material analysis and substance identification. It creates a 'diffraction fingerprint' of molecular structures to differentiate between materials – even those with very similar densities. This makes it particularly suited to detecting constantly changing compounds in powder, liquid or solid forms, such as 'homemade' explosives and narcotics.

It delivers new levels of security and efficiency for several key use cases. Firstly, the precise and orthogonal approach to detection makes it ideal for resolving alarms generated by upstream explosives detection systems – particularly high volume, high speed, applications such as multi-level hold baggage screening or fast-forwarding parcels and mail.

When integrated into material and baggage handling systems, a single SDX 10060 XD_i can receive alarm queries from several Level 1 scanners. This substantially reduces the need for on-screen resolution by security operators, hand searches, trace detection or other manual inspections by automatically clearing false alarms. In turn, it generates substantial operational cost savings and minimises human intervention and error.

The compliance standards also make the SDX 10060 XD_i suitable for Level 1 screening at smaller airports handling lower volumes of baggage.

Additionally, the impressive material specific detection capabilities can support custom agencies by transforming inbound screening for a range of prohibited items including narcotics. As contraband detection is not subject to regulatory approval, the detection library can be adapted and increased as requirements change.

Diffraction is one of the few technologies likely to be able to meet the requirements of new regulatory standards responding to tomorrow's evolving threats, helping you to future proof your operations.

Main features

Tunnel dimensions 1050 [W] x 605 [H] mm

Max. object size 1000 [W] x 600 [H] mm

Conveyor height 880 mm

Belt speed (adjustable) approx. 100 – 200 mm/s (depending on scanning mode)

Max. conveyor load 50kg/m² (110lbs/m²)

(evenly distributed) 250kg (551lbs) total

X-ray generator

Diffraction part • Cooling 180 kV • hermetically sealed, water cooling

Beam direction (diffraction part) fan-shaped (top to bottom)

Line scanner part • Cooling 160 kV • hermetically sealed, oil bath

Beam direction (line scanner part) view A: diagonal (bottom to top) • view B: diagonal (from side)

Image quality (both views) wire resolution: AWG 36 • steel penetration: 30 mm

Installation data

Radiation data Meets all applicable laws and regulations with respect to X-ray emitting devices

CE conformity In compliance with requirements of 2006/42/EC, 2014/35/EU, 2014/30/EU

Sound pressure level < 65 db (A) [at 1 m distance]

Operating / storage temperature 5°C - 35°C / -20°C - +60°C

Humidity 20% - 90% (non-condensing)

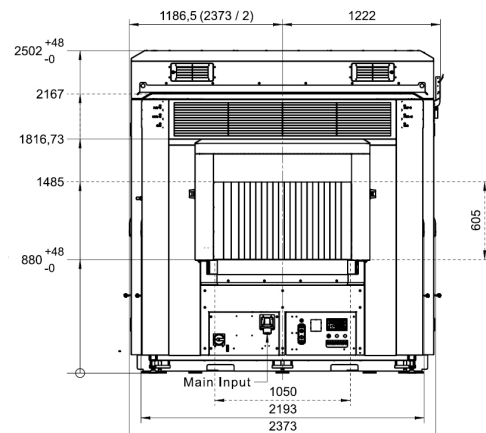
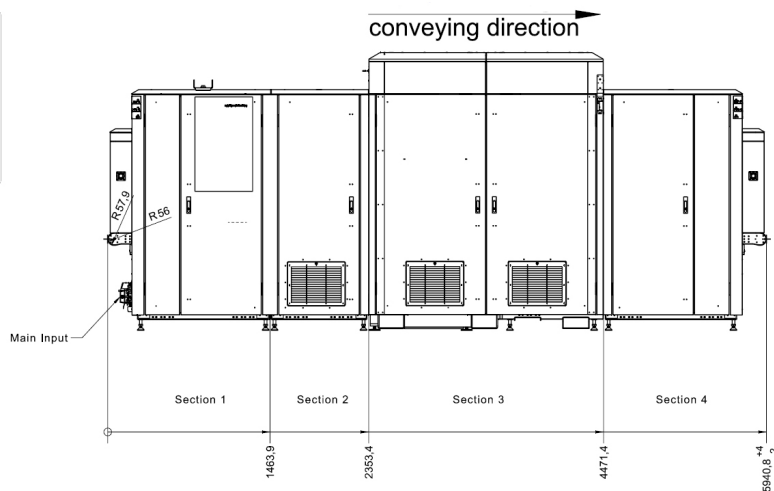
Power supply 400 V AC ± 10% • 50 Hz ± 1%

Power consumption approx. 18 kVA (operating)

Protection class system IP 33

Dimensions • Weight 5945 (L) x 2360 (W) x 2550 (H) mm • approx. 8800 kg

Mechanical construction steel construction with steel panels, mounted on roller castors (except for diffraction part)
standard color(s): diffraction part RAL B11-W1 (blue), other parts RAL 7016 (dark gray)



For product information, sales or service, please go to www.smithsdetection.com/locations

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