

Comparison of X-Ray Technologies for Whole Body Imaging (AIT)

Modality	kVp (kV)	mA	Dose / Scan (µrem)	Dose / Scan (nSv)	Scans per Screening	Scan Duration (s)	Throughput (people / hour)	Information Source
Backscatter (in general)	50 to 90	3 to 5	3 to 9	30 to 90	2 to 4	3 to 8	varies with vendor	Health Protection Agency (UK)*
[REDACTED]								
AS&E SmartCheck (backscatter)	100	3	9	90	2 to 4	8	80 to 120 at 2 scans each	vendor supplied documentation; dose from Cerra rpt
[REDACTED]								
Rapiscan Secure 1000 (backscatter) Aviation app**	50	5	1.8	18	2; single pose (front & back scanners)	3	240 with overlapping scan & review	Secure 1000 Sr. Project Manager
[REDACTED]								

** At present (1/09) there are about 250 Secure 1000 systems in the field and they are all single view. 60 % of these are military. The rest are courthouses, prisons, etc. Very few are in aviation settings, but that is about to change. TSA has put out a \$173M IDIQ (Indefinite delivery, indefinite quantity; fixed price) for whole-body imaging machines and Rapiscan has already received an order for 150 units. These are for single pose (2 view, front & back) systems. [REDACTED] purchase 500 to 600 systems. [REDACTED]