



SIGMA
SECURITY SYSTEM

ENGINEERED FOR
SAFE & SECURE SCREENING

Si-660PRO

MILLIMETER WAVE FULL BODY SCANNER

AI-POWERED SECURITY SCREENING



NON-CONTACT FULL BODY SCREENING

Detects concealed threats
without physical contact.



FAST SCANNING & HIGH THROUGHPUT

Scans in seconds with
high throughput.

PRIVACY PROTECTION

Privacy-first screening.



IDEAL FOR



AIRPORTS



RAILWAY
STATIONS



SUBWAY
STATIONS



MEETING
VENUES



EVENTS



JUDICIAL FACILITIES
& PRISONS



AI DETECTION & ALARM

Detects threats and
alerts instantly.



FRONT & BACK IMAGING

Shows front and back
images simultaneously.



NETWORK & RECORD MANAGEMENT

Stores and manages
screening records securely.



KOREAN TECHNOLOGY



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Si-660PRO

FEATURES & TECHNOLOGY

The SIGMA Si-660PRO is an active millimeter-wave human body scanner that uses three-dimensional holographic imaging technology to provide accurate, efficient and non-contact security inspection.

The system combines two-dimensional electrical scanning with one-dimensional mechanical scanning to obtain front and back millimeter-wave images. Deep-learning and artificial-intelligence technology automatically identifies and marks suspected prohibited items.



KEY FEATURES



HIGH-PRECISION IMAGING

Line resolution of ≤ 2 mm and spatial resolution of ≤ 4 mm support accurate detection and object-location marking.



AI OBJECT IDENTIFICATION

Deep-learning analysis automatically identifies suspected objects and marks their approximate location.



FAST INSPECTION

Scanning is completed within ≤ 2.5 seconds, while complete detection is performed within ≤ 5 seconds.



METAL & NON-METAL DETECTION

Detects restricted metallic and non-metallic items carried on the body or concealed beneath clothing.



PRIVACY PROTECTION

Inspection results use generic body graphics, while the inspected person's face can be blurred.



RECORDING & PLAYBACK

Automatically records, stores, searches and plays back images and videos from at least 5,000 security inspections.



VIDEO SURVEILLANCE

Integral optical video surveillance supports monitoring of designated security-inspection areas.



SYSTEM MANAGEMENT

Supports user and administrator permissions, real-time operating-status monitoring, fault information and fault codes.

TECHNICAL SPECIFICATIONS

	TECHNOLOGY	Active millimeter-wave 3D holographic imaging
	SCANNING METHOD	2D electrical scanning + 1D mechanical scanning
	IMAGING RANGE	Height: 0.1–2 m; Width: 1 m
	SCANNING TIME	≤ 2.5 seconds
	DETECTION TIME	≤ 5 seconds
	THROUGHPUT	600–700 people per hour
	LINE RESOLUTION	≤ 2 mm
	SPATIAL RESOLUTION	≤ 4 mm

	EQUIPMENT DIMENSIONS	≤ 2400 (H) $\times$ 1300 (W) $\times$ 1250 (D) mm; Excluding host workstation
	IMAGING-HOST WEIGHT	≤ 340 kg
	NETWORK INTERFACE	Minimum 1 $\times$ RJ45; 1000 Mbps
	STANDBY POWER	Less than 300 W
	PEAK OPERATING POWER	Less than 1000 W
	HOST POWER RATING	≤ 2000 W
	EQUIPMENT NOISE	≤ 63.2 dB(A); Measured 1 m from the host
	STARTUP TIME	≤ 99 seconds

SYSTEM CAPABILITIES

-  Automatic suspected-object detection
-  Automatic location marking
-  Audible alarm notification
-  Real-time operating-status monitoring
-  Online transmission of status and alarm data
-  Image contrast, brightness, zoom, reversal, pseudo-colour and noise-reduction tools.

OPERATIONAL ADVANTAGES

-  Non-contact inspection
-  Extremely low millimeter-wave radiation
-  Metallic and non-metallic object detection
-  High passenger throughput
-  Privacy-protected result display
-  Automatic image and video recording

Si-660PRO

MILLIMETER WAVE FULL BODY SECURITY SCANNER

The SIGMA Si-660PRO provides fast, accurate and non-contact human security inspection using active millimeter-wave imaging and AI-supported analysis. It detects suspected metallic and non-metallic objects, marks their location and provides an audible warning for further inspection.



≤5 SEC DETECTION



IDEAL FOR



AIRPORTS

Supports efficient passenger security inspection in high-traffic terminal environments.



RAILWAY STATIONS

Provides fast contactless screening for passengers entering railway facilities.



SUBWAY STATIONS

Helps screen large passenger flows at metro and subway checkpoints.



IMPORTANT MEETING VENUES

Supports controlled access and screening at official venues.



LARGE-SCALE EVENTS

Provides fast screening for large events and high visitor volumes.



JUDICIAL FACILITIES & PRISONS

Supports enhanced security inspection in correctional and judicial facilities.

METALLIC & NON-METALLIC OBJECT DETECTION

METALLIC OBJECTS



Pistol



Knife



Lighter



USB Drive



NON-METALLIC OBJECTS



Drugs



Ceramic Knife



Liquid



Explosive



Powder



Chemical Reagent



Cash

PRIVACY & DATA MANAGEMENT



GENERIC BODY DISPLAY

Inspection results are displayed using generic doll-style body graphics.



FACE BLURRING

The face of the inspected person can be blurred in the corresponding optical image.



5,000+ INSPECTION RECORDS

Stores images from no fewer than 5,000 security checks with search, query and playback functions.



PERMISSION MANAGEMENT

Different passwords and hierarchical permissions are assigned to users and administrators.

INTELLIGENT SYSTEM FUNCTIONS



AUTOMATIC DETECTION & ALARM

Automatically identifies suspected objects, marks their location and provides an audible alarm.



OPTICAL VIDEO SURVEILLANCE

Supports optical video monitoring of designated security-screening areas.



REAL-TIME FAULT MONITORING

Displays equipment operating status, fault information and fault codes in real time.



IMAGE PROCESSING TOOLS

Includes contrast, brightness, reversal, enlargement, reset, pseudo-colour and noise-reduction functions.



NON-CONTACT INSPECTION

No direct physical contact during security screening.



600-700 PEOPLE / HOUR

High-throughput processing for busy locations.



≤2.5 SECOND SCANNING

Fast active millimeter-wave scanning process.



PRIVACY PROTECTION

Generic graphics and face-blurring functions protect confidentiality.