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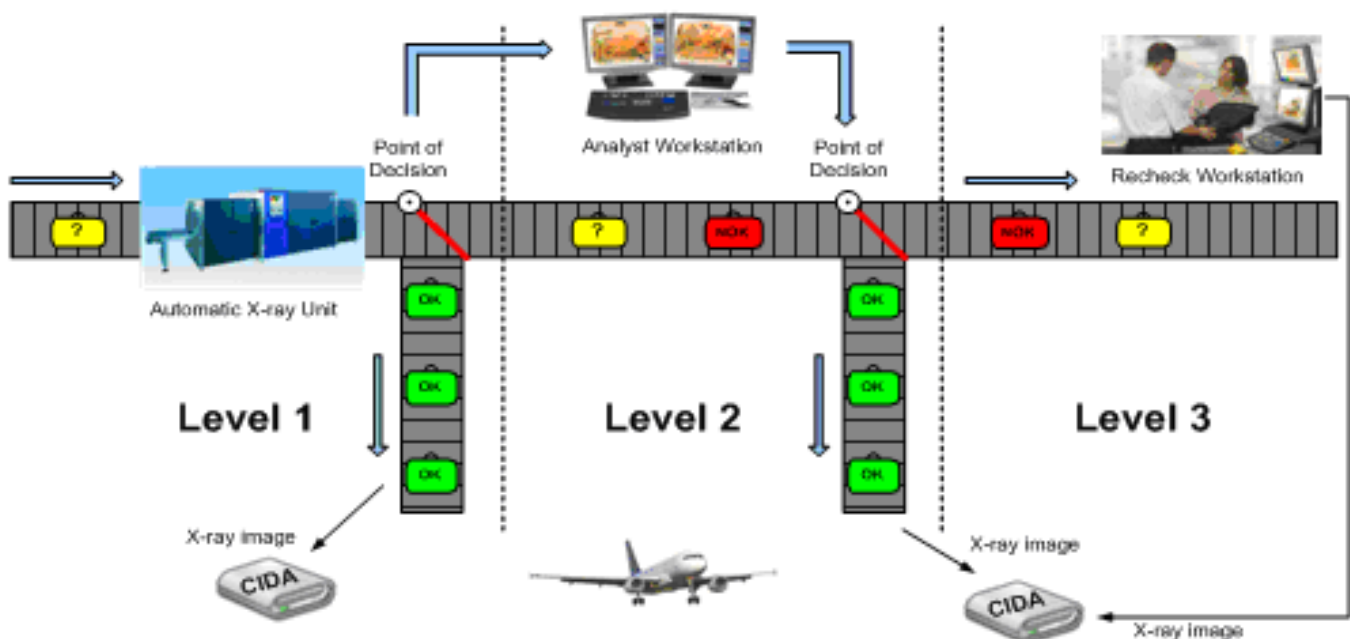# MatriX Server *Small*

SOLUTION FOR IMAGE DISTRIBUTION

Connects up to

5 X-ray units
10 Analyst Workstations
1 HMC Workstation

Includes

HMS
MS
Network switches

- Hardware and software for optimal image distribution and system control
- Management server provides large range of administration functions, statistics reports and TIP functionality
- Scalable, numerous options available
- Reliability and durability due to high-quality server, network and switch cabinet technology
- Supports up to 5 X-ray units, 10 analyst stations, 1 management workstations and
- 1 central printer

Technical Specification

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The MatriX Server Cabinet connects the X-ray units and Operator Workstations to manage the distribution of images and results within a multi level hold baggage screening system.

Each Airport does have individual requirements for the HBS image routing. The MatriX Server meets this from a large set of standard configurations allowing result and machine dependant routing of images, group routing, time out management and workstation load distribution, all implemented in this unique piece of software. Furthermore a basic statistics monitor, diagnosis and system status information are provided on the administration display.

The high level of reliability of the MatriX Server function is based on the usage of highest quality components.The MatriX Server is based on commercially available standard hardware selected for maximum performance and reliability. The 19" cabinet houses the actual MatriX Server computers, network switches and an operator console for administrative and maintenance tasks together with the related UPS, internal power and network cabling.

The MatriX Server is assembled and configured according to the customer specific needs in the Smiths Heimann factory. The out of factory testing program ensures a ready for operation system is delivered to site.

MatriX Server *Small* supports up to:

     5 X-ray units + 10 analyst stations + 1 management workstation HMC + 1 central printer

Technical Specification

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Hardware and software for optimal image distribution and system control: The software specially designed and optimised for this application controls the image distribution and transmission of results within the system. High-quality, application-specific and tested server and network technology guarantees the reliable transport of image and control data.

HMS, the Heimann Management Server for system configuration and monitoring. The server provides a large range of administrative functions, statistics reports and TIP functionality. These can be recalled over the local HMC console or via the entire network from an optional HMC.

Reliability and durability due to high-quality server, network and switch cabinet technology: Exclusively brand-name products of leading manufacturers are used which proved successful in demanding tests. This guarantees a long-standing availability of all core components and maximum manufacturing quality. The switch cabinet design meets all relevant safety standards, regulations and rules.

Individual configuration: The standard configuration provides a range of standard routing rules which can also cover very special processes. This is additionally optimised by the project-specific adaption of time parameters according to the specific customer requirements.

Maintenance access: Two lockable doors the front side of which is made of glass secure the access to the maintenance console which is equipped with a 17" TFT monitor, keyboard and trackball and provides detailed status and system information.

UPS: The entire switch cabinet electronics are supplied via several UPS. They supply the system in case of a voltage breakdown with a hold-up time of up to 5 minutes. This secures the cushioning when the airport supply is switched over, or in case of short voltage drops. In case of a longer-lasting power failure, a controlled shutdown takes place and the system is automatically restarted after the power supply is restored.

Scalable architecture, numerous options available. Cost-effective modifications and special solutions can be implemented on the basis of the standard system.

Available options MatriX Server *Small*	
Air-conditioning	**Auxiliary device to extend the temperature range**
Single-mode optical fibre technology:	**Allows for the connection of units over distances greater than 1000 m**
Foreign network connection	**Installation of a special hardware firewall and configuration of special communications, e. g. for time synchronization or to exchange results with the airport computer**
More X-ray units	**Depending on the application, other combinations of X-ray units. analyst stations and management workstations can possibly be connected on the basis of the same system.**
Cold Standby Kit	**Replacement hardware kit to restore operation quickest possible in case of hardware failures. Consisting of pre-configured server and network hardware.**

Technical Specification

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Technical Data MatriX Server *Small*	
Dimensions	60 cm x 100 cm x 195 cm
Total weight	Approx. 400 kg
Cabinet colour	RAL 7035
Cabinet access	Lockable doors. Glass front door.
Weight of crated cabinet	Approx.600 kg
Dimensions of crated cabinet	Approx.80 cm x 120 cm x 230 cm
Operating temperature	+5°C to +25°C
Storage temperature	-15°C to +45°C
Humidity	10% to 90%, non-condensing
Power requirement	230V +10%/-15%, 50-60Hz, N/PE, Fuse 16A
Power consumption	max. 2400W
UPS performance	Up to 5 minutes supply of complete cabinet
Supported x-ray units	Up to 5 units via multimode fibre optics connections
Supported Level 2 workstations	Up to 8 units via CAT5 connections
Supported Level 3 workstations	Up to 2 units via multimode fibre optics connections
Supported Management workstations	Up to 1 HMC via CAT5 connection
Supported network printers	Up to 1 network printer via CAT5 connection
Included Products	Single Matrix Server + HMS + HMC Hardware and all software licences included
Network	Ethernet based switching technology with sufficient ports and speed
Routing modes	Large number of standard routing modes available with customer specific timing configuration
Power connector	Terminals inside cabinet
Fibre optics cable connection	Patch panel inside cabinet, ST or SC connectors
CAT5 cable connection	Patch panel inside, terminals
Server hardware	Siemens TX150 Series or better
Processor, memory, network, hard disk, optical drives	Compliant
Operating systems	Windows 2008 Server (or better) + Linux
Administration console	17" TFT screen, lockable keyboard with trackball, KVM switch

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