Experience the advanced technology

The Unified Security Platform for Versatile Applications

- **Single, Unified Platform**
  Seamless integration of all your security systems enables you to manage everything from a single seat.

- **Open Architecture**
  Fully customizable system design.

- **Intelligence**
  Collect and analyze vast amount of data quickly and easily to assist with instant situation awareness and real-time decision making.

www.samsungsecurity.com
Total Security Manager (TSM)

TSM is a true enterprise class platform designed to manage multiple security systems within an integrated environment. Seamless integration of analog CCTV, network CCTV, Intelligent video analytics, access control, Intrusion detection, ground radar, security robots and ANPR devices and packages provides centralized situation awareness, management and alarm handling, whilst a distributed system design allows for large-scale, multi-level management and cross-functional capabilities. TSM’s open architecture and protocols offer a flexible and scalable solution to perfectly fit your project requirements. This flexibility also offers an optimal security solution for various applications such as city surveillance, military, oil/gas facilities, healthcare, banks, commercial or public buildings and transportation.

**Benefits**

- Platform based scalability via open architecture and protocol
- Single point of management and control
- System interworking scenario with user defined rules
- Hierarchical control and management of multiple sites
- Sophisticated Interoperability
- Centralized alarm management
- Intelligent video analytics provides forensic tools to track and assess events
- Integrated Video wall system
- Web-based management and communication

**TSM Integration Platform**

Multi Application Systems: ACS, CCTV, IDS, ANPR, VTA, Radar, Robot, …
Features

- **TSM Integration Platform Connection**
  - System Manager
    - All-in-one server for management, database, messaging
    - Management and back-end security alarm
    - GUI interface for remote management
    - Centralized event and alarm management
    - Real-time data analysis and management
  - Video Display Module
    - Up to 320 video outputs for LCD monitors or video wall
    - Remote management via TSM control client
    - Virtual matrix auto sequence
  - Video Analytics Module
    - 8 channel, 30fps
    - Real-time detection of more than 6 types of events and up to 32 targets in each camera view
  - Video Analytics Module
    - Power video analytics processing on the back-end system
    - Up to 4 cameras simultaneously
    - Real-time detection of more than 8 types of events and up to 32 targets in each camera view
  - Video Display Module
    - Up to 4 display outputs for LCD monitors or video wall
    - Remote management via TSM control client
    - Virtual matrix auto sequence
  - TSM Control Client
    - Manage up to 1024 devices
    - Up to 144 channel display with 4 monitors
    - Optional 3D GIS map interface
    - Integrated configuration and administration interface for all components
    - Integrated event and alarm monitoring and management

- **Single Point Management**
  - A sophisticated management station allows users to monitor and control all security aspects via a single interface. This enhances an organization’s security and offers unparalleled ease of use and ultimate operational efficiency.

- **Interoperability & Integration**
  - As well as providing state-of-the-art video surveillance functionality, TSM supports the integration of access control and intrusion detection systems. In addition, the system can provide interface support at an application level for complete interoperability with other devices.

- **Intelligent Alarm Management for Appropriate Response**
  - In the event of potential threat, TSM immediately locates events using its GIS map. TSM not only alerts security staff to the alarm, but can automatically initiate appropriate activities according to predefined scenarios.

- **Video Management**
  - TSM integrates both analog and IP hardware, protecting your investment in existing systems whilst providing a future-proof solution. Distributed local recording on site is possible with DVRs or NVRs, which can be accessed through TSM providing a central point of video management.

  - Automatic display of camera views per alarm gives precise situation awareness for an appropriate response. A virtual matrix function and integrated video wall provides a user-friendly management environment.

- **Access Control**
  - High-performance access control systems are designed to meet the most demanding security needs:
    - Permission-based access control by individual, group, time schedule
    - Elevator control with management of floor access privileges
    - Visitor management
    - Guard tour, interlock, anti-pass-back

- **Flexible and Open Architecture**
  - Thanks to its open architecture and protocols, operating over the IP network, an optimal system can be designed using the TSM platform. Various high-performance modules share the same single platform and can be combined to provide flexibility. This modular structure will bring greater flexibility to fit your exacting requirements.

  - Video analytics module
  - Video display module
  - Access control module
  - VTA (Video-based traffic analysis) module
  - ANPR module
  - GIS module

- **Intelligent Video Analytics**
  - TSM video analytics are highly specialized algorithms designed to perform optimally in different environments. Analytics-generated alerts can be displayed on an operator’s console, client’s console and video wall screen simultaneously, together with relevant metadata. Powerful video analytics processing pinpoints potential security breaches and alerts operators of significant events in real-time for immediate response and provides forensic tools to track events.

- **GIS Based Map**
  - TSM’s GIS 2D/3D map is able to display multiple alarms and cameras on a single map layout to quickly locate potential threats and alarms. Map-based navigation to complex sites and cameras is significantly enhanced with multi-layer mapping and dynamic camera positioning.

  - TSM filters critical events from cameras and other sensor inputs allowing guards to focus on potential threats and stopping attempted security breaches before they occur.
**Field Devices**

- Legacy System
- Analog Cameras
- ANPR Cameras
- IP Cameras
- RFID Card Reader
- Exit Button
- Auto Sliding Door
- Intrusion Sensors
- Fence Detectors
- Alarm Panel
- Signal Processor

**Transmission via WAN/LAN**

**Security Room**

- ANPR Module
- VTR Module
- ACS Module
- Video Analytics Module
- Video Display Module
- Video Wall
- System Manager
- Media Server
- Video Center

**Transmission**

**Command Control Center**

- Vehicle Database
- Traffic Center
- ITS Server
- Traffic Analysis
- VTA Module
- ACS Module
- Video Analytics Module
- Video Display Module
- Video Wall
- System Manager
- Media Server
- Video Center

**Remote Control**

- TSM Web Client
- TSM Client

**Network**

- Analog Video
- Control / Weigand
- IP Network
- Hot Standby

*VTA - Video based Traffic Analysis
*ACS - Access Control System
Modular, Optional Application Packages

**ANPR (Auto Number Plate Recognition)**
- Superior plate number recognition performance
- High-speed plate capture technology (up to 250km/h)
- Multiple application support via 3rd party integration: bus lane enforcement, parking management, congestion charging, toll enforcement, Police etc.

**VTA (Video-based Traffic Analysis)**
- Collect and analyze traffic data
- Provide real-time traffic status
- Traffic volume, congestion degree, average driving speed, ...
- Incident detection
- Interface to ITS (Intelligent Traffic System)

**Video Wall System**
- Easy install, service and maintain thanks to block type modular structure
- 46” super narrow bezel DID LCD panel
- Built-in RGB/Video matrix (16 x 16)
- Position multiple sources with any size, anywhere across the video wall
- Automatic screen layout switching with user-defined scenarios
- Video wall management via TSM control client

**Access Control and Intrusion Detection**
- TCP/IP network based multi-door access controller
- Access group, individual access rights management
- Fingerprint recognition for higher security level
- Central system management via TSM - real-time monitoring of access event, alarms, door status, device health
- Visitor management, time & attendance, elevator control
- Map-based alarm display
- Event-based CCTV integration

**Security Robot System**
- Tracking (Night, Thermal)
- Tracking (Day, CCD)
- Detection (Day, CCD)
- Detection (Night, Thermal)
- > 2km
- > 1km
- > 1km
- > 2km
- • Tracking (Night, Thermal)
  - Thermal Camera
  - Endless Rotate
  - • Ultra long light detection
  - • 30 ~ 400mm zoom lens
  - • Laser illuminator
- • Tracking (Day, CCD)
  - Network PTZ Camera
- • Detection (Night, Thermal)
  - Thermal Camera
  - IR Camera
  - Network PTZ Camera
  - Endless Rotate
  - • High-performance, long-range
  - • Thermal-enhanced CCD
  - • Digital & Analog output
- • Detection (Day, CCD)
  - Network PTZ Camera

**Military**
- Integration of multiple sub-systems - CCTV (analogue, Network), ANPR (Auto Number Plate Recognition), VTA (Video-based Traffic Analysis), Access Control and Intrusion Detection, Security Robot System
- Modular application design provides flexible system configuration
- Vehicle access control using ANPR technology
- Security check point - Detect prohibited items and prevent information leaks
- Restricted area access control with RFID and biometric recognition technology
- Fence detection system - Mesh type fence detectors
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**Control Center**
- TSM Control Client
- Video Display Module
- Media Server
- Video Analytics Module

**Perimeter Surveillance**
- Thermal Positioning Camera
- Security Gate
- Fence Detection System
- Infrared Camera
- IR Camera
- Thermal Camera
- Endless Rotate
- PT Motor
- ±180°
- ±80°
- ±60°
- ±45°
- ±30°
- ±15°

**Intrusion Detection**
- Indoor Motion Detection
- Glass Break Detection
- Fence Detection System
- Ultrasonic
- Seismic
- Infrared
- ANPR
- Fingerprint Reader
- Door Entry System
- Exit Button
- Video Phone
- Card Reader
- Fingerprint Reader

**CCTV Surveillance**
- Vehicle Access Control
- Visitor Management
- Time & Attendance
- Elevator Control
- Map-based alarm display
- Event-based CCTV integration

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**Video Analytics Module**
- Collect and analyze traffic data
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- Traffic volume, congestion degree, average driving speed, ...
- Incident detection
- Interface to ITS (Intelligent Traffic System)
TSM Application Area

Buildings

[Design Points]
- Elevator control with management of floor access
- Individual & group access level with time schedule
- Visitor management, time & attendance
- Access control system starts and stops recording making recorded video available in the access log
- 1.3MP, 3MP HD network cameras
- Vehicle access control by ANPR
- Security checkpoint for detecting prohibited items in/out
- Intrusion detection with ultrasonic, acoustic, IR detectors
- Central view and control of multi-site security
- Single point of management and control

Airport

[Design Points]
- Central view and control of multi-site security
- Single point of management and control
- Intelligent video analytics - Crowd detection, abandoned object detection, virtual line crossing
- Day and night perimeter surveillance with thermal positioning cameras, IR cameras and security robot
- 1.3MP, 3MP HD network cameras
- Accurate event location on the map with video verification
- Modular application design providing flexible system configuration
- X-Ray scanning system, security check point
- ANPR technology for vehicle access control and detect wanted vehicles
- Restricted area security with RFID and biometric recognition technology

[Diagram]

- RFID Card / Fingerprint Recognition
- Stair hall, ELV hall, Security room
- X-Ray Check Point
- Detection of weapons, metal, explosive devices
- Vehicle Access Control
- ID recognition using long range RFID card or ANPR technology
- Fixed Camera
- Parking area surveillance
- Ceiling or wall mount
- ELV Control
- Floor button activation by ID card recognition
- Speed Gate
- Boundary between public area and security area in a lobby
- Security Center
- Central control and monitoring
- Security Check Point
- HD PTZ Dome
- Access Control
- Command and Control Center
- Exit Button
- Door Lock
- Card Reader
- Fence Detection
- ANPR Perimeter Security
- (Thermal / IR / Security Robot)
TSM Application Area

Port

- Thermal positioning camera for wide area surveillance day & night
- Container scanner system - Detection of smuggling, radiation, weapons
- Wireless mesh network - Flexible system configuration without interrupting container travel and port facility deployment
- Accurate allocate event on the map with video verification
- Speed gate to set boundary between public zone and security zone in a lobby
- Hierarchical control and management of multiple sites
- Single point of management and control
- Central view and control of multi-site security

- Thermal Positioning Cameras
- Access Control of Security Area
- Integrated Control and Monitoring
- HD Network Camera

Oil & GAS

- Integrated security management system that brings together all aspects of security in one homogeneous system
- Detection of oil leakage, fire, smoke
- Accurate allocate event on the map with video verification
- Uniformly handling events and interactions across video, intrusion and access systems
- Accurate situation awareness and fast response
- Mesh type fence detectors
- Wireless mesh network, fiber optic network
- User-friendly management system, accessed on-site or remotely via the web

- Integrated Control and Monitoring
- Client Monitoring Station

- Interoperability
- HD Network Camera
- CCTV
- ACS
- Intrusion
- Fire Alarm

- Thermal Camera
  - Temperature detection

- Fire Alarm
  - Automatic strobe lights for evacuation

- PTZ to View Event Spot

- Speed Gate

- Fence Detection System

- Container Scanner System
  - Detection of smuggling, radiation, weapons

- Vehicle Access Control via ANPR

- Access Control and Time & Attendance

- Exit Button

- Door Lock

- Card Reader

- HD Network Camera

- Security Robot

- Fence Detection System
TSM Application Area

City

[Design Points]
• Uniform interface to configure and manage video, intrusion and access systems
• Hierarchical control and management of multiple sites
• Virtual digital video switch system based in network switching
• 2D/3D GIS map system for accurate positioning alarm/event
• Position multiple video images at any size, anywhere across the video wall
• Advanced video analytics, intelligent threat awareness and classification
• ANPR for wanted vehicle detection and illegal parking enforcement
• Natural disaster surveillance with high performance positioning camera

Bank

[Design Points]
• Reliable intrusion detection with various technology
  - Microwave, PIR, Seismic, Magnetic
• Perimeter surveillance with IR cameras
• HD PTZ network cameras
• Uniform event handling and interaction across video, intrusion and access control systems
• Event starting and tagging recording, and recorded video available in event log
• Alarm transmission via Internet, PSTN, mobile network
• Support multiple clients for remote operation
• Selectable combination of fingerprint + RFID + PIN for access control
• Alarm center for immediate intervention
[Design Points]

- Interlock (Airlock) system to maintain the air purity and pressure in a certain area and prevent impure air flow from outside
- Automatic door opening for evacuation in the event of fire
- Access to the system from both desktop clients and web clients allowing users to monitor device status, reports and video footage from anywhere
- Accurate event location (Fire, smoke, intruder or other suspicious activities) on the map with video verification
- Pinpoint potential security breaches with video analytics
- Integration of access control, interlock, intrusion, fire alarm with CCTV (Event and tag recording with recorded video available in the event log)

[Design Points]

- Mesh type fence detectors
- Seamless integration of:
  - Access control - Network CCTV - Intrusion detection - Security robots - Other security applications
  - User definable system interaction scenario:
  - Intrusion detection via fence detectors - Alarm - PTZ camera - Search lights - Pop up video - Intervention
  - Single point of management and control
  - Central view and control of multi-site security
  - Security level control: RFID + Fingerprint + PIN (Selectable combination)
TSM Application Area

Hospital

[Design Points]

- Active RFID based real-time location system
- Real time location monitoring of patient tag, asset tag, nurse call or personnel ID tag
- Vehicle access control and parking guide system using ANPR
- Access control by access rights of an individual or group - drug storage, server room, document room etc.
- 24-hour CCTV surveillance - helicopter landing pad, ambulance parking lot, underground parking area etc.
- Wireless communication network between medical personnel and security guards for immediate response
- Limit access to emergency patient-only elevator by verifying ID card

[Central Monitoring Room]

Department - 1  Department - 2  Department - 3  Department - 4

- Personnel Access Control
- Exit Button

Retail

[Design Points]

- Loss prevention - inhibition and prevention of inappropriate cash handling/theft and unauthorized zone entry by staff or visitors
- Incident detection - smoke & fire detection via video analytics providing a real-time video stream and automatic trigger of video recording at the scene, intrusion detection alarm and suspicious activities
- Intruder detection and crime prevention using intelligent video analytics and e-mail notification to inform shop managers and security officers
- Ease of data retrieval and recorded video search capability to examine and improve product display strategy for sales
- Visitor counting and visitor travel pattern analysis report to provide data for marketing purposes
- Real-time access to the system via a web browser from anywhere in the world
- Interface to internet shopping site

[Central Monitoring Room]

- Vehicle Access Control
- Parking Guide System
- In-store Customer Behavior
- Customer Counting
- Accident Detection
- Loss Prevention, Security & Safety
- Reporting

[Department #1]

- POS
- ELV Control
- Intrusion Detection System
  - IT server room
  - Pharmacy

[Department #2]

- Fixed Dome Camera
- PTZ Camera: Panorama view
- IR Camera

[Department #3]

- Vandal-Resistant Dome Camera
- Bi-Camera

[Department #4]

- Shop #1
- Shop #2
- Shop #N
- Web Server
- Server Access

[Remote Access]

- i-Shopper

[Central Monitoring Room]

- Warehouse
- POS
- EAS
- Shop #B
- Shop #C