



DINA RMC

DINA Remote Monitoring Center (RMC), the newest member of the DINA product family, is a solution for centralized monitoring and control of several remote surveillance sites. It opens a new era in video surveillance: the evolution of Closed Circuit Television (CCTV) towards Open Circuit Television (OCTV) by breaking the chains of coax cables and extending the accessibility of the system over networks - no more limitations of time or place! The versatile features of DINA RMC facilitate new security services and create a dedicated platform for cost-effective centralized video surveillance.

Centralized Surveillance

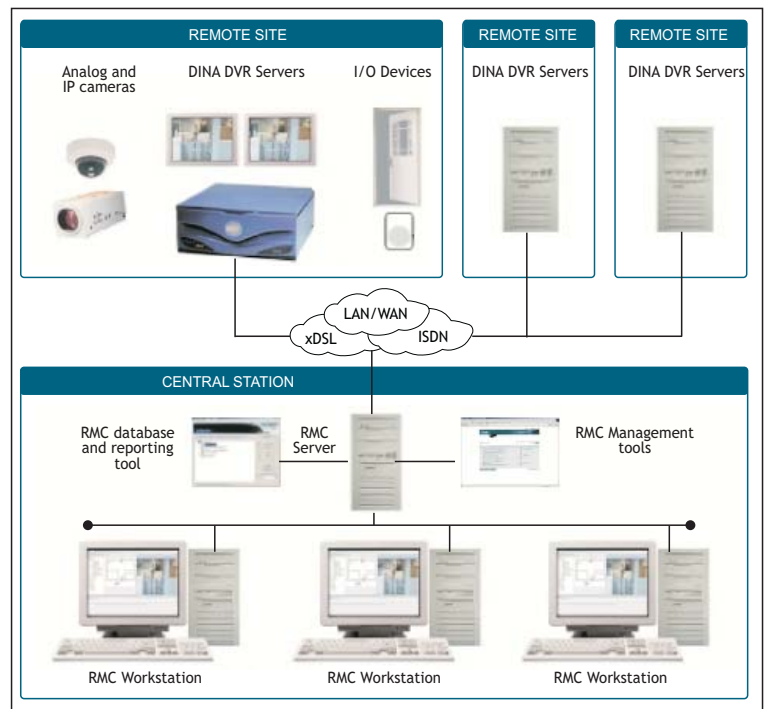
DINA RMC offers to security service providers a possibility to receive CCTV images, recorded audio, and alarms to a surveillance centre from remote sites, thus enabling the offering of new video surveillance services, like visual verification of alarms and virtual camera guarding tours.

Scalable Monitoring System

The RMC system is easily scalable according to user requirements from a single monitoring PC to a system of up to eight parallel workstations with access to 100 video recorders and up to 1600 remote cameras.

Intuitive User Interface

The clear and intuitive user interface makes DINA RMC easy to get acquainted with - no long and expensive training is necessary!



Features

- Active connection with up to 100 DINA DVR Servers and 1600 video cameras
- Up to eight RMC Workstations per each RMC Server
- Communication over TCP/IP networks (LAN, WAN, xDSL, ISDN)
- Support for WMC9 and JPEG compression
- Intuitive user interface - cameras and other devices are displayed on the Site Navigator list and as icons on the Site Map
- Real-time camera windows with remote dome camera control and digital zoom
- Programmable remote camera tours
- Retrieval and playback of recorded audio from remote sites
- Advanced search tool with time/date, motion and graphical activity search, alarm list, and audio activity search for efficient data retrieval
- Copying of images and sequences on CD/DVD as .avi files
- Remote device control through relay outputs
- Alarm messages from remote sites on the alarm list of RMC Workstations with optional pop-up camera windows
- Effective SQL database with a reporting tool
- User management with service profiles; user, operational and error logs; browser-based system management tool
- Language versions: English, Estonian, Finnish, Norwegian, Russian, Spanish and Swedish

DINA Digital Video Management System

DINA Digital Video Management System consists of DINA DVR Recorders/Servers, DINA RMC Remote management Center and seamless integration of digital CCTV with other systems. All parts of the system communicate over TCP/IP networks.

Local Recording with DINA DVR Servers

DINA DVR Servers at the surveillance sites record video images from analog or IP cameras continuously, as result of detected motion, or as response to an alarm event. Alarm inputs from external devices can start the recording. The DVR Server can also record audio clips and control external devices like dome cameras, video matrices, lights, locks or doors.

Communication over TCP/IP networks

Any type of TCP/IP network can be used for data transfer in DINA system: LAN, WAN, WLAN or the Internet (xDSL or ISDN). Firewall and VPN solutions are recommended for data security in public Internet environment.

Centralized Remote Monitoring with DINA RMC

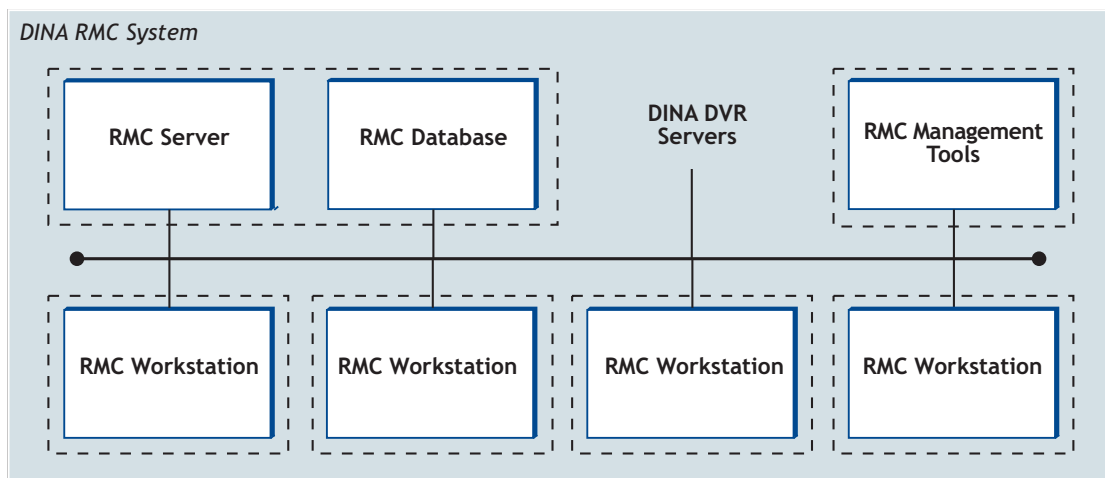
Each RMC Server can communicate with up to 100 DINA DVR Servers. Real-time video or recorded footage can be viewed and recorded audio listened at the RMC Workstations. DVR Servers send alarm event messages to RMC Server, where they are stored in the database. The whole digital video system can be managed centrally through the RMC System Manager.

Seamless System Integration

The DINA system can be integrated with other systems like Access Control and Point-of-Sales. This enables seamless data communication as well as common database and user interface between the systems.

DINA RMC System

The DINA RMC systems consists of RMC Server and one or more (up to eight) RMC Workstations. The system also includes a database and tools for system and user profile management.



RMC Server - Communication and Remote Management

RMC Server controls the data communication between DVR Servers and RMC Workstations. It also receives the event messages from DVR Servers, stores them in the database and sends them further to RMC Workstations.

User management and logbooks

RMC Server maintains a list of the users and manages their profiles. When a user logs in at a Workstation, the RMC Server checks the authenticity of his user name and password, and sends the respective user profile to the Workstation. It opens communication links to those DVR Servers that are included in the user profile. RMC Server also handles the system's user, error and event logs.

Individual User Profiles

The user profiles are created and edited with RMC Profile

Manager. A user profile defines the DVR Servers, from which alarm event messages are received. It also determines the accessible cameras and other devices.

RMC Workstations - Remote Operation

RMC Server maintains a list of the users and manages their profiles. When a user logs in at a Workstation, the RMC Server checks the authenticity of his user name and password, and sends the respective user profile to the Workstation. It opens communication links to those DVR Servers that are included in the user profile. RMC Server also handles the system's user, error and event logs.

Centralized System Management

The RMC system enables centralized management and configuration of remote DVR Servers, users and services. It also provides advanced mechanisms for error detection and recovery throughout the entire DINA system.

DINA RMC Workstation Remote Monitoring and Alarm Event Management

RMC Workstation is the graphical user interface of the system. The operator can access cameras and executable programs as well as activate audio playback by means of either the Site Navigator list or the Site Map graphics. The RMC Workstation also includes tools for alarm event management. All windows are resizable and they can be positioned freely on the screen.

Easy to use and learn

Due to the intuitive and clear graphical interface of RMC Workstation, the learning period remains short - no long training periods!

User-defined desktop

All user data is stored in the user profile - no separate configuration is necessary. The alarm messages and pop-up camera windows from pre-programmed DVR Servers open automatically on the screen.

Fast and easy connection to remote sites

The user can open a connection to a remote camera or other device through the Site Navigator list or the Site Map. With a few mouse clicks, a camera window or the advanced search tool (time, motion, and graphical activity search) is opened on the screen. All camera windows can be zoomed digitally in a new window.

Recorded audio clips can also be retrieved and played at the RMC Workstation.

Remote control of dome cameras

A remote dome camera can be targeted or zoomed easily with the mouse by clicking the camera window. Preset dome positions can also be programmed on the Site Navigator list - the chosen view opens with a few clicks of the mouse.

Efficient alarm event management

The alarm event messages from DINA DVR Servers are displayed in the alarm list of RMC Workstation. A camera window with real-time video or recorded image from the time the alarm was generated can be programmed to open automatically on the screen. The operator can edit the alarm messages by adding comments or by changing the status of the alarm.

RMC Workstation

The screenshot shows the RMC Workstation interface with several windows. Callout boxes point to specific features:

- The Site Navigator lists the target sites with cameras, audio sources and other devices.** (Points to the Site Navigator list window)
- Real-time camera windows can be opened from the Site Navigator list or from Site Map.** (Points to a camera window)
- Dome cameras can be controlled directly from the camera windows. A list of preset positions is also available.** (Points to a camera window with a control panel)
- The advanced search tool enables graphic activity search, motion search and time/date search.** (Points to the search tool window)
- The Site Map displays cameras, audio sources and other devices as icons on a map or floor plan.** (Points to the Site Map window)
- Alarm event messages are displayed on the Alarm List.** (Points to the Alarm List window)
- A camera window can be opened automatically as response to a received alarm.** (Points to a camera window)
- Alarm events can be edited by adding comments and changing the alarm status.** (Points to the Alarm List window)
- Recorded footage connected with an alarm event can be viewed in a camera window.** (Points to a camera window)
- All cameras of a site or sub-site can be opened as a group window with one mouse click.** (Points to a group of camera windows)

RMC Applications 1: Surveillance as a Service

For Alarm Receiving Centers, DINA RMC facilitates new security services like visual verification of alarms and remote guarding tours with surveillance cameras.

Visual verification of alarms

The alarms generated by intruder alarm systems at remote sites are sent to Alarm Receiving Centers over telephone lines or IP networks. There, they are shown as text lines on the operator's display. However, the operator does not really know what has happened at the target site.

With DINA RMC, it is now possible to open a connection to the site and see from recorded footage what has triggered the alarm. Simultaneously, a real-time camera window tells the current situation at the site. This helps the operator to choose the right response to the alarm - e.g. to send a guard to the site or to contact the police.

Remote camera guarding tours

The nightly visits of guards at the sites cause high costs. Mostly, there is nothing to report - at the same time the burglars just wait for the guards to leave.

At least a part of the guarding rounds can be substituted by remote camera guarding tours utilizing the programmable camera tours of DINA RMC. This means substantial cost savings for end-user customers and new business for providers of security services.



DINA RMC is an effective tool to facilitate new security services and thus to create new business opportunities for Alarm Receiving Centers.

RMC Applications 2: Centralized Video Surveillance

Centralized video surveillance saves operational costs and guarantees higher security, as surveillance is carried out by specially trained personnel. Especially cost-effective this is for companies with several outlets, like retail chains, nationwide operating corporations and offices on the public sector.

Loss prevention in retail segment

In each and every there is need for continuous and efficient video surveillance. The hard competition forces the management to cut costs everywhere - including security. The loss prevention manager must daily consider, how much resources can be allocated to each security system and how the benefits could be maximized.

The centralization of video surveillance in one place and in hands of specially trained personnel facilitates significant cost savings. DINA RMC is a dedicated tool for this purpose!

Security in public places

Airports, railway stations and bus terminals are places, where thousands of people pass through every day. Just the large number of visitors causes noteworthy risks -

there are always criminals among the crowd. Additional risks are caused by eventual accidents, where the liabilities can be immense. A centralized surveillance and alarm management with DINA RMC is a cost-effective, scalable and easy-to-use solution for optimized risk management.

Centralized surveillance is a practical and cost-effective way to cut down personnel and other operational costs, while the security level rises owing to trained personnel and well functioning processes.



Mirasys Ltd. develops innovative digital video recording solutions, which provide added-value benefits and positively affect customers' bottom line. Mirasys achieves this through a close working partnership with partners and customers.

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