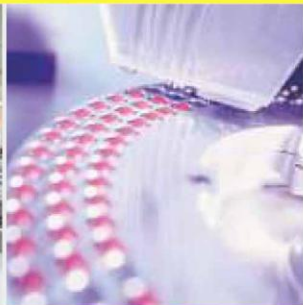
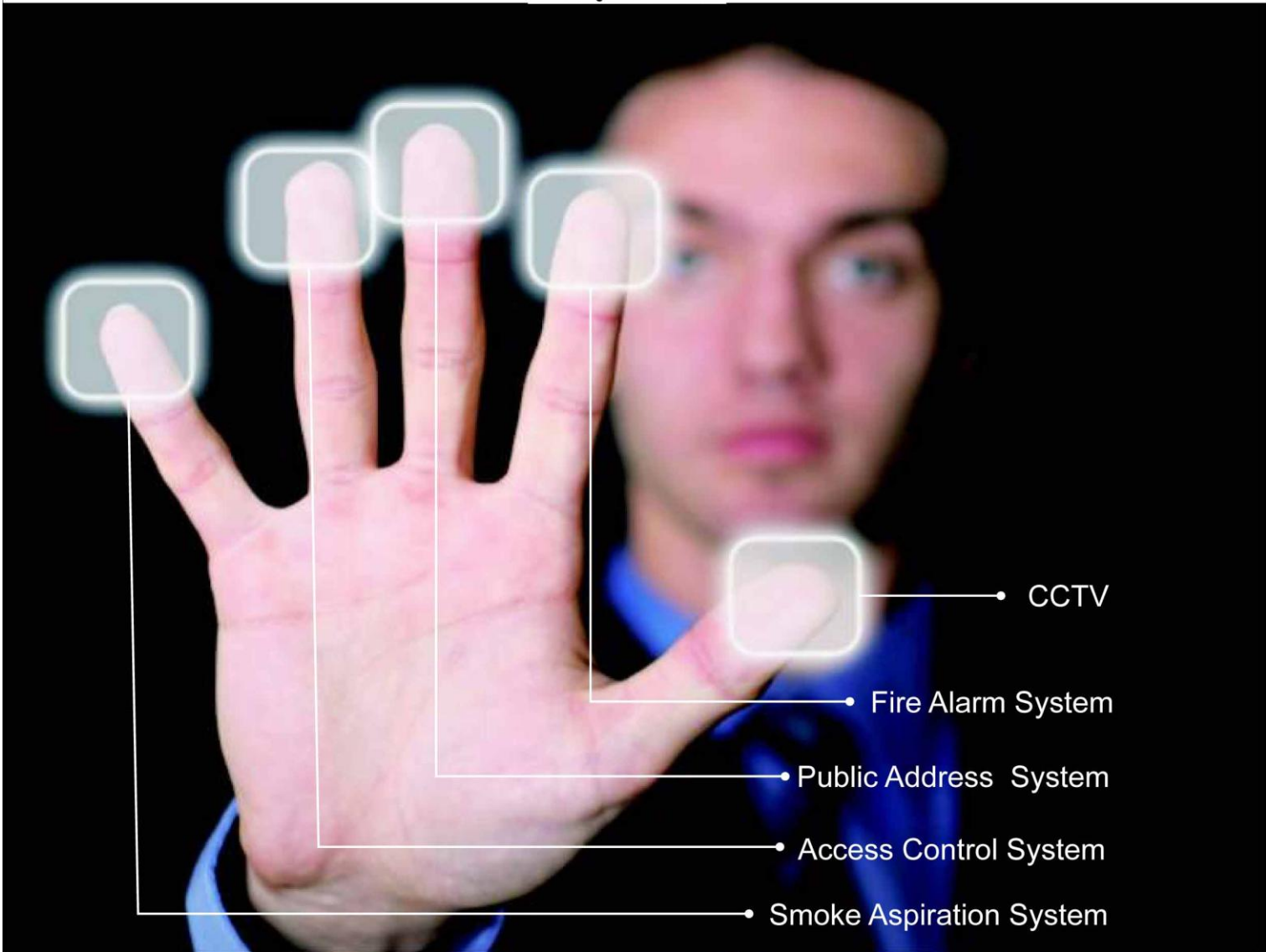
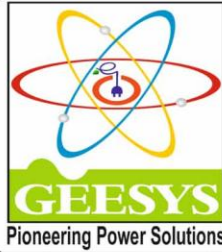


Integrated Building Management System



Innovative, Intelligent, Flexible and cost effective buildings





• CCTV

• Fire Alarm System

• Public Address System

• Access Control System

• Smoke Aspiration System

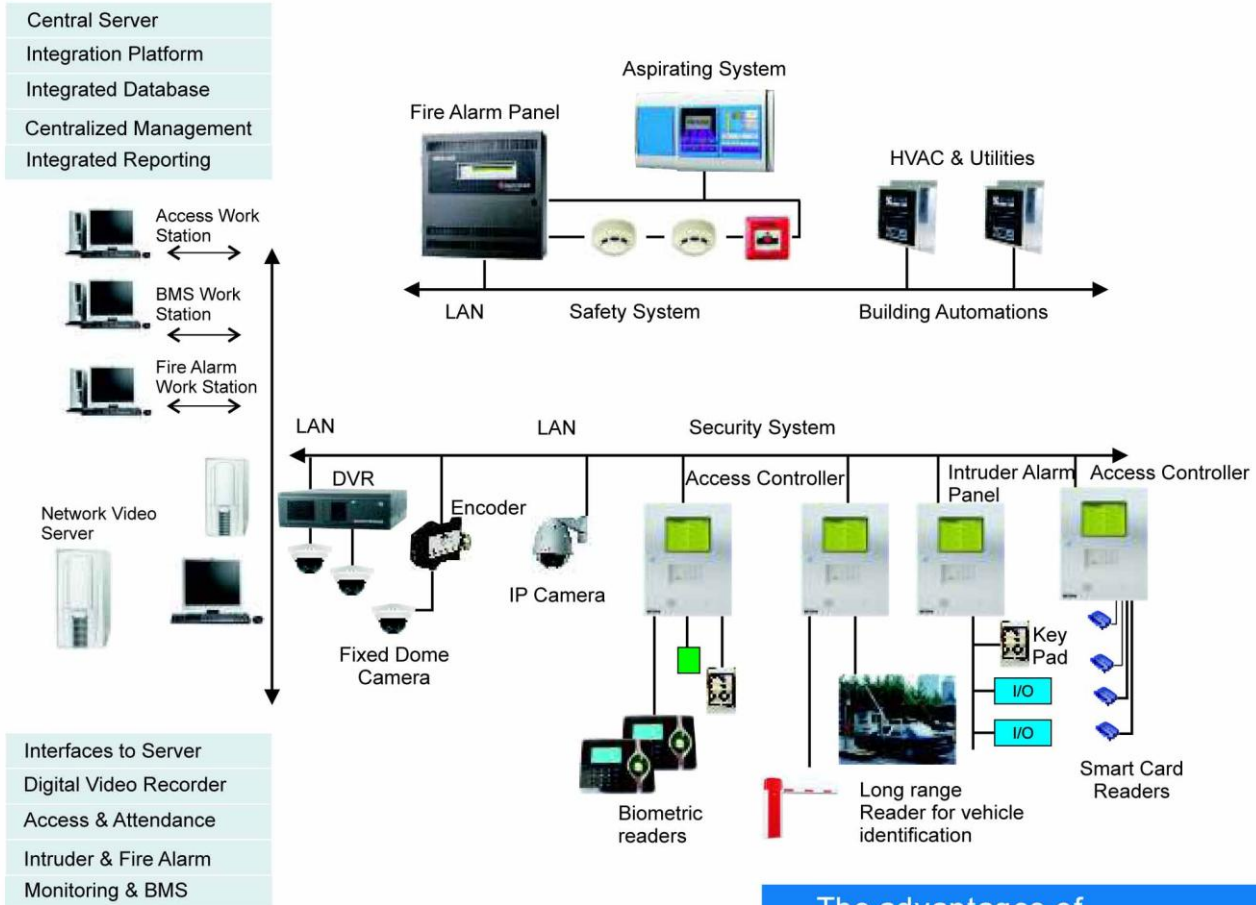


IBMS

Integrated Building Management
Fire, Safety & Surveillance System

Total Building Solutions

Intelligence without Complexity



The advantages of Total Building Solutions

- ✦ Range of Solutions
- ✦ Scalability
- ✦ Interoperability
- ✦ Open Protocols
- ✦ Partition & Rights Management
- ✦ Highly Resilient

- Less Planning Time
- Shorter Installation Time
- Increased Comfort And Energy Efficiency
- Increases Security And Protection For People, Data And Business Processes
- Customers Can Concentrate On The Core Business
- Lower Operating Expenses
- Increased Reliability For Your Technical Infrastructure
- Higher Productivity
- Increased Protection Of Investment Throughout The Building's Life Span

Building Automation System

Building Automation System (BAS) is a micro processor control system designed to monitor and control all parameters of HVAC, electrical, PHE, fire protection, elevators and other building services/utilities. BAS helps in conserving energy by executing various energy efficient programs for optimized performance of the systems and to assist the operation and maintenance of the installation.

The system is DDC (Direct Digital Control) based with functions distributed both physically and functionally over the field controllers. The DDC interface, with sensors, actuators and environmental control systems, carries out various functions of energy management, alarm detection, time / event / holiday / temporary scheduling, communication maintenance & report generation.

These controllers are capable of functioning on a stand-alone mode, even in case of loss of communication with the central control station. We work closely with the owners and architects to install software packages into the system that are customized for the project. Other integrated packages in the system include active graphics software, energy management software, alarm indication software, maintenance package and billing software.



Access Control Systems

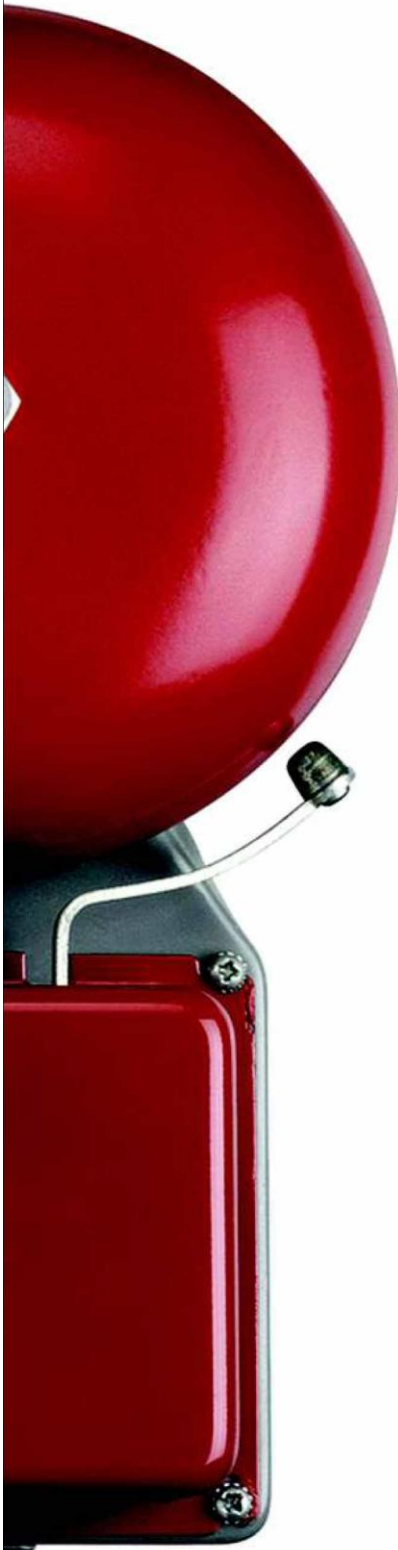
In some cases, physical access control systems are integrated with electronic ones. For example, a door may be unlocked with a swipe card, an RFID keyfob, or through biometric means. A card access control system is one of the most common types of electronic door control, using a card with a magnetic stripe which can be swiped through a reader on the door. Hotels often use this system, which can be used to make temporary room keys. Laboratories and other facilities with areas requiring high security may also use a card control system, making the cards double as personnel identification.

Network security is also important, especially in a company which handles sensitive data. Access control systems which span over computer networks are typically administered in a central location, with each user being given a unique identity. An administrator grants access privileges to personnel on a case by case basis, using settings within the administration software.

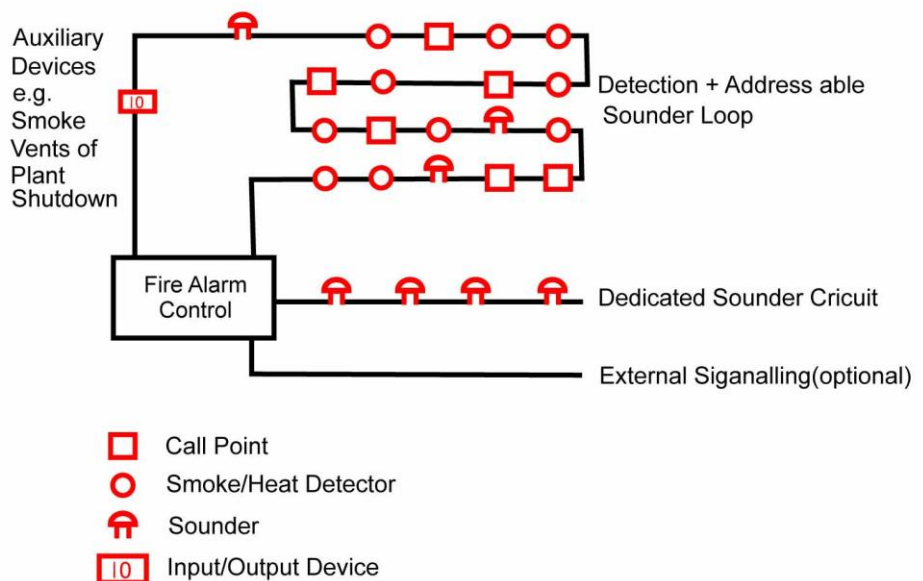
Analogue Addressable Fire Alarm Systems Solutions

In an analogue addressable system detectors are wired in a loop around the building with each detector having its own unique 'address'. The system may contain one or more loops depending upon the size of the system and design requirements. The Fire Control Panel 'communicates' with each detector individually and receives a status report, i.e. 'Healthy', 'In Alarm' or 'In Fault', etc. As each detector has an individual 'address' the fire alarm control panel is able to display/indicate the precise location of the device in question, which obviously helps speed the location of an incident and for this reason 'zoning' of the system is not necessary, although it may be done for convenience.

Addressable detectors are, in themselves, 'intelligent' devices which are capable of reporting far more than just fire or fault conditions; for example, most detectors are able to signal if contamination within the device (dust, etc.) reaches a pre-set level enabling maintenance to take place prior to problems being experienced. Addressable detectors are also able to provide pre-alarm warnings when smoke/heat levels reach a pre-set level, enabling investigation of the fire to take place prior to a full evacuation alarm and Fire Brigade signalling taking place.



A typical Analogue Addressable Fire Alarm Arrangement



Fire Detection and Alarm System

We design addressable fire detection and alarm systems as per NFPA72 and AHJ requirements, and in accordance with project and design guidelines. Main/repeater fire alarm control panel, smoke/heat detectors, visual/audible strobes and manual call points are integral components of the system.



Fire Fighting System

In accordance with the NFPA "cause and effect matrix", we provide interlocking/alarm arrangement for the safety of the property and its occupants, and for their safe egress using the voice evacuation system. Further, emergency lighting is provided through UPS for all exit signs, staircase lighting and on all escape routes. Moreover, all exit signs are also provided with battery back up facility to ensure 100% reliability/operation during distress. We ensure that all alarm initiating and supervisory devices are individually addressable.



Fire Suppression System

Public Address System

We customize the Public Address System for announcements and emergency voice evacuation as per the requirement of the installation. The system comprise of head end equipment, distribution equipment and reception equipment. One of these key elements of the Public Address System design is to provide Digital Signal Processors (DSP). DSP multi-effect devices offer a huge range of sound processing options (reverb, delay, echo, compression, etc.) in a single unit.



The public address system comprises equipment of sufficient capacity to ensure distribution of voice to various areas of the building with equal clarity. Public address components are provided with graduated priority. The system is integrated with the Fire Alarm System through necessary interfaces. Each floor constitutes a zone with selective floor-wise isolation facility.



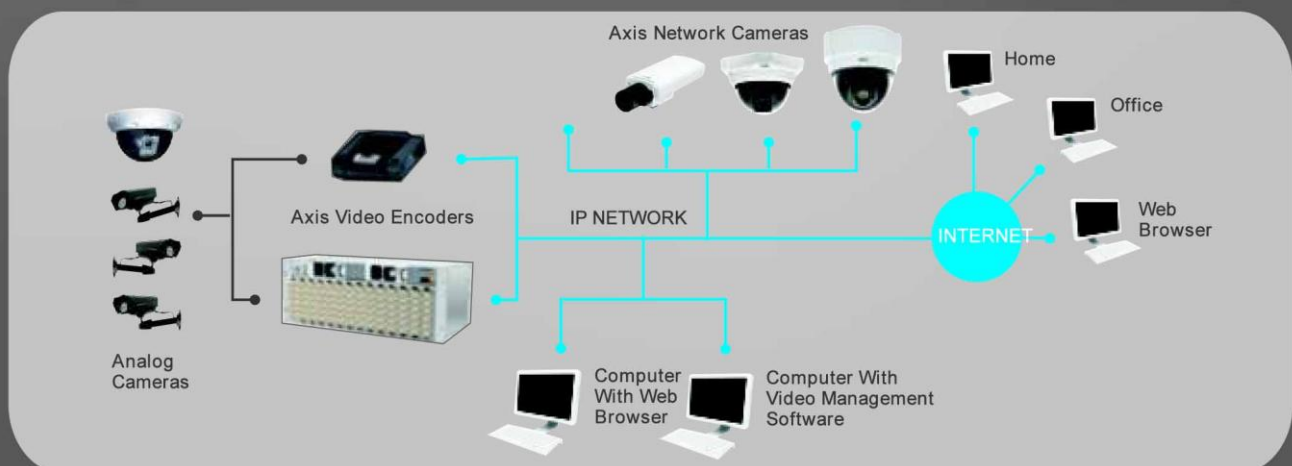
IP Based CCTV Systems

For Electronic Surveillance purposes, indoor/outdoor type cameras are located at strategic points as per the challenges of the design and to maintain discreet positioning as required. These cameras are connected to either DVR or a server based system.

Network video, often also called IP-based video surveillance or IP-Surveillance as it is applied in the security industry, uses a wired or wireless IP network as the backbone for transporting digital video, audio and other data. When Power over Ethernet (PoE) technology is applied, the network can also be used to carry power to network video products.

Video Analytics Solutions

Video analytics is the practice of using computers to automatically identify things of interest without an operator having to view the video. The most commonly used types of video analytics professionally deployed are perimeter violation, license plate recognition and people counting. GMP caters to this need by providing integrated software for Video Analytics and CCTV surveillance systems.

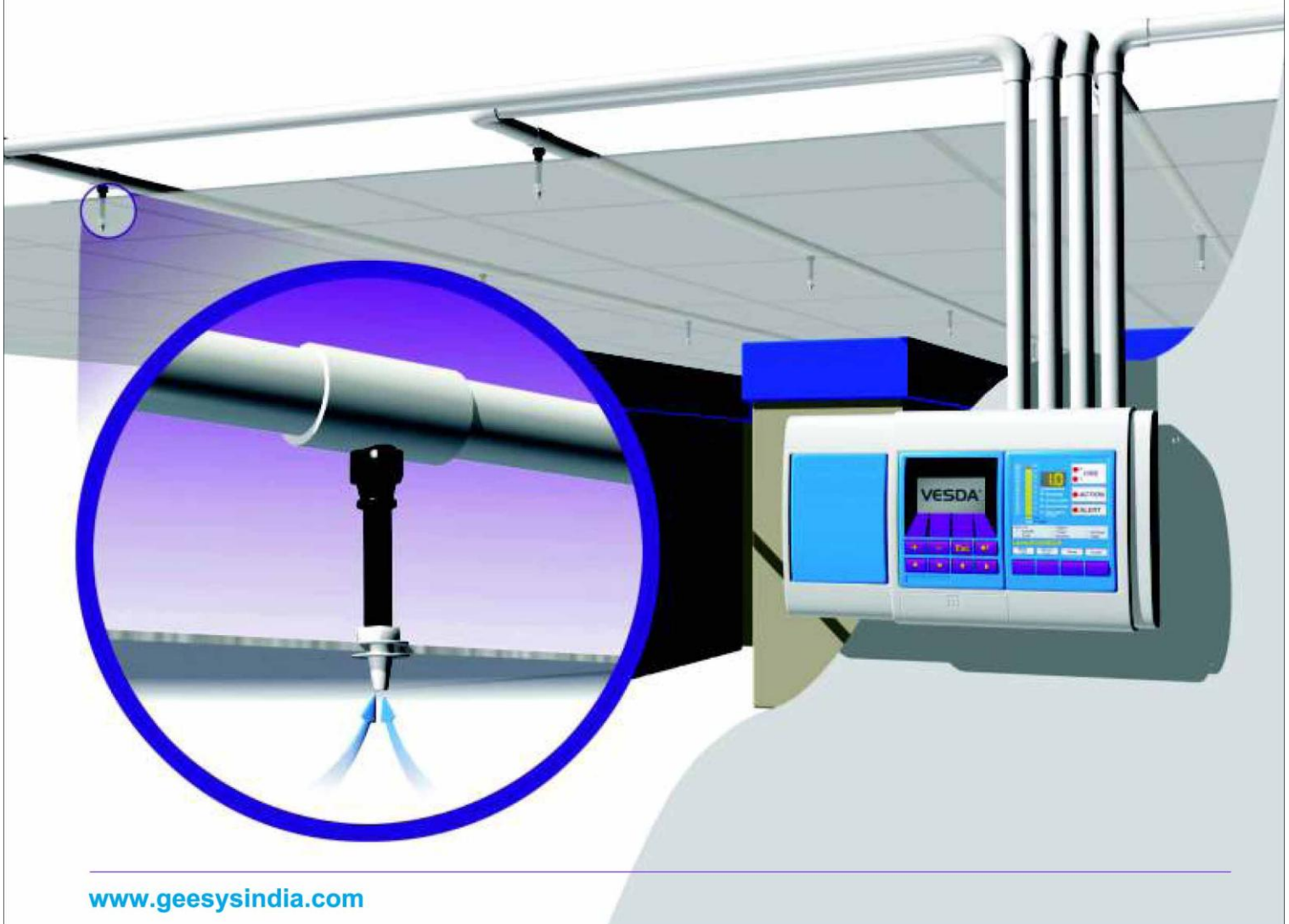


A network video system comprises many different components, such as network cameras, video encoders and video management software. The other components including the network, storage and servers are all standard IT equipment.

Smoke Aspiration System

The VESDA (As called familiarly)air sampling fire detection system detects the invisible by-products of materials as they degrade during the precombustion stages of an incipient fire. And, by actively and continuously sampling air, the system operates independently of air movements.

In operation air samples are continuously drawn from the monitored environment, typically through a sampling pipe network with the aid of a high efficiency aspirator. On the way to the fire detector the air samples pass through a filter assembly to screen out large airborne dust particles. Once inside the air sampling detector the samples are exposed to a high-intensity and broad-spectrum light source. The incident light scattered from smoke particles in the air sample passes through a series of optical components to a solid state light receiver. The light is converted to an electronic signal and passed to the control system.



Water leakage Detection Systems

Water leak detection has become high up on the list of priorities for many companies and Industries.

The water leak detector cable itself is the sensor. Every centimetre of rugged, fire rated cable is sensitive to water and when water comes into contact with the cable, even a few millilitres, the system is able to detect the leak AND report the location. The detection cable can be installed in any length from a few metres in a drip tray to hundreds of metres around the perimeter of an office area.

Typical applications in office buildings include the monitoring of fan-coil units around the edge of the building office floors, detectors surrounding the central utility core on each floor of the building and dedicated monitoring of leaks in electrical switch gear rooms, server rooms, network communications, etc.



GEESYS Technologies

(Expert in General Electrical and Electronics System Support)

New No. 21, Old No.9, Seshachalam Street,
Saidapet, Chennai - 600 015. Tamil Nadu, India

Phone: +91 44 45012354, +91 9710412354

Email: geesyscare@gesysindia.com

Website: www.geesysindia.com