

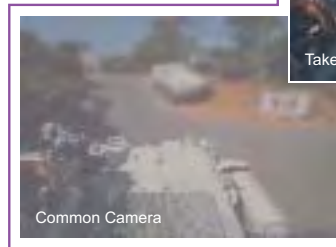
Active Infrared CCTV Night Vision Surveillance System

System Introduction

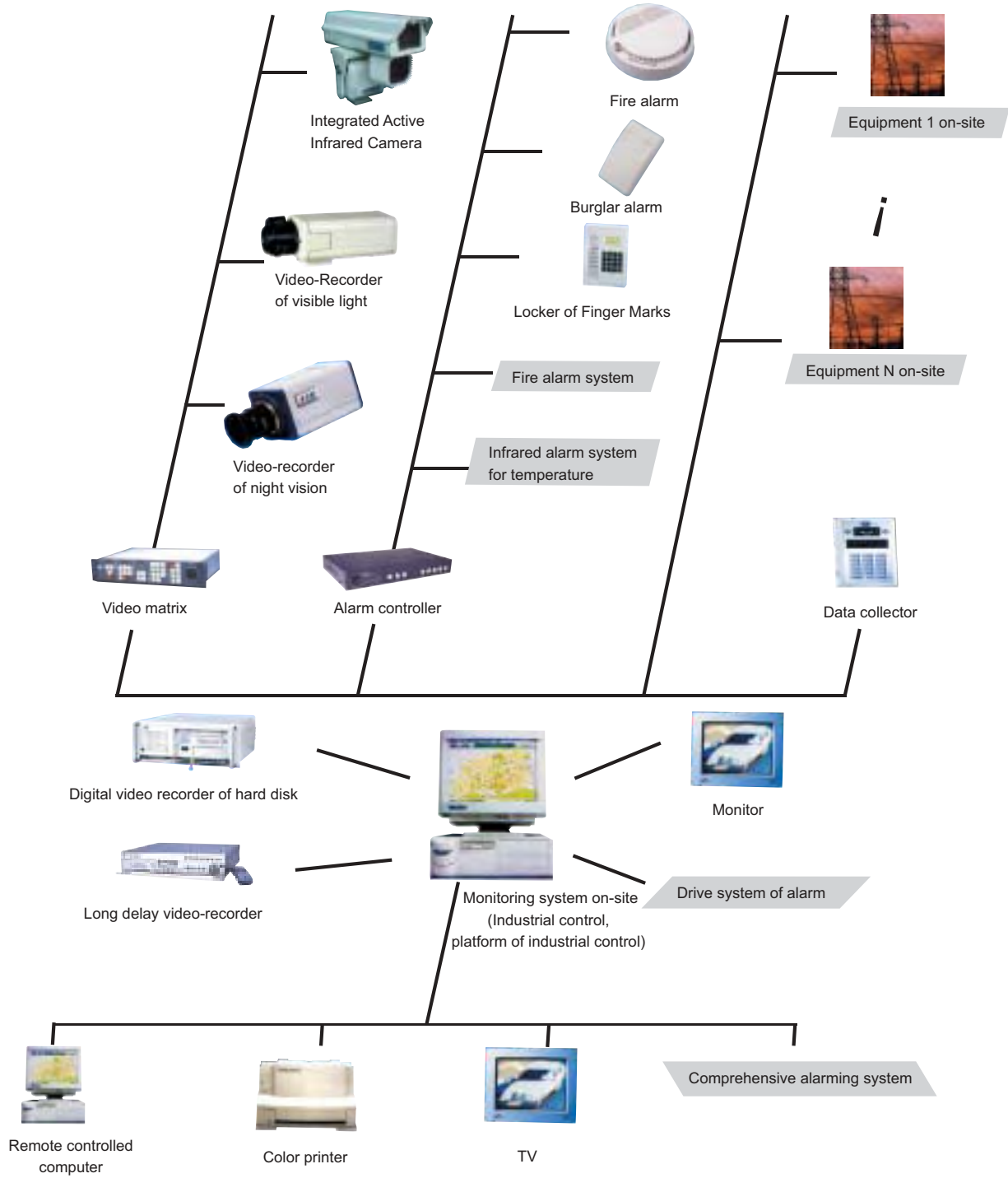
The role of the on-site security is gradually changing to one that is less labour intensive, more definitive and safer. Conventional visible light CCTV cameras and near infrared images have led the way to observation based security systems. Today, with the requirements for increased security and surveillance, law enforcement, security agencies and individual organizations are demanding more than what conventional surveillance cameras provide. Middle infrared or as commonly called, thermal infrared cameras are able to offer improved night vision capabilities, but at a substantial price.

Cantronic Systems Inc. has developed a cost effective solution that meets visible camera requirements as well as providing infrared illumination capabilities not previously attained with a near infrared camera. Day or night, misty or raining, this integrated system is a plug and play camera with performance that extends far beyond the limits of the environment. Furthermore, we have installed an optical filter so that it can function and gain clear images in rear-light situations. This system is updated with advanced technologies such as integrated opto-electronics, multi-media, data management, network communication and various monitoring techniques to evaluate a complete site to promptly deal with any situation from any location.

Applications include: Military troops, police, frontier defences, airports, military facilities, prisons, traffic monitoring, treasury securities, museums, jewellery counters, video conferences, residential securities, visible operations under water, ocean fishing, customs agencies, night navigations and visible alert systems.



System Structure

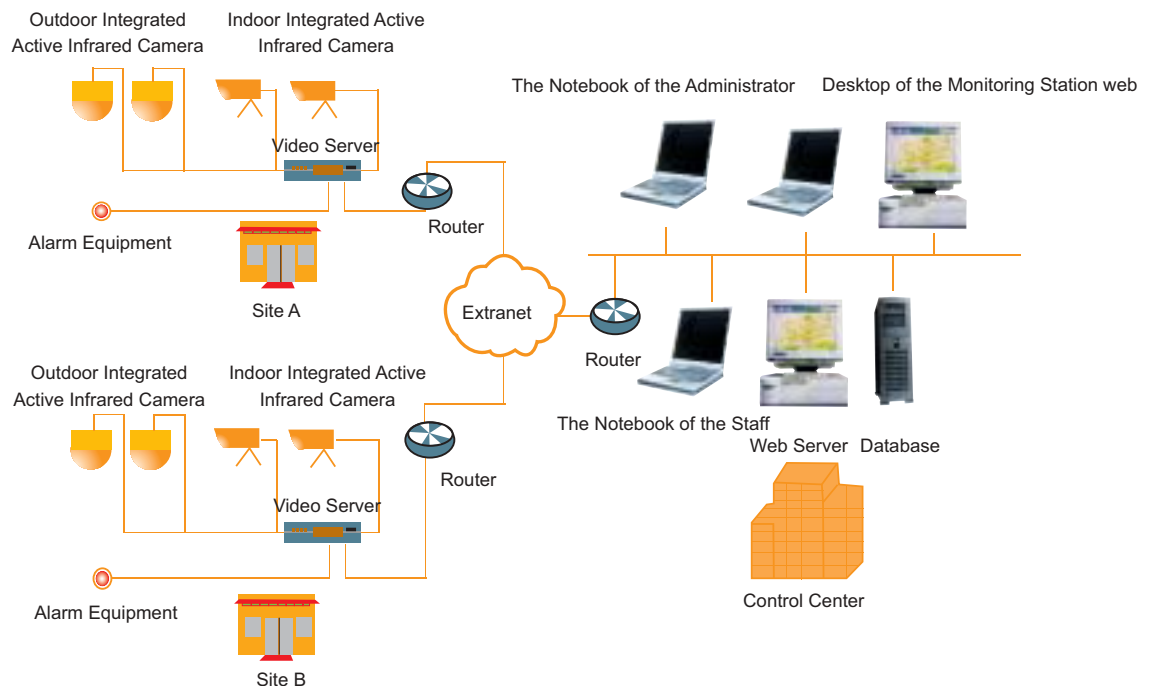


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Camera Features

- **High resolution:** The high-resolution CSI-IR products can display very clear images of the object up to a distance of 600 metres. The images that are captured in rain, mist, snow and complete dark are as clear as if they were taken in the daytime.

The main products include: integrated weatherproof night vision system, night vision camera, active infrared illuminator, computer and digital network video monitoring system.
- **Ultra-long range:** Our company has the highest level of knowledge about the technology of the ultra-long range active infrared night vision. A good example of this is the 200-metre active infrared illuminator. Other products can only display objects, up to 50 metres.
- **High Reliability:** Degeneration is very common in night vision products. This degeneration causes deterioration of the image after a short use. Our night vision products do not have any degeneration during the product's rated life span. The expected life span of an active infrared illuminator is 10,000 hours if it is used under regular conditions.
- **Built-in Network System Configuration:** CSI-IR uses internet/intranet transmission of WEB control to save installation time, decrease costs and use global transmission of the images. Site situations can be monitored at any time, no matter where you are.

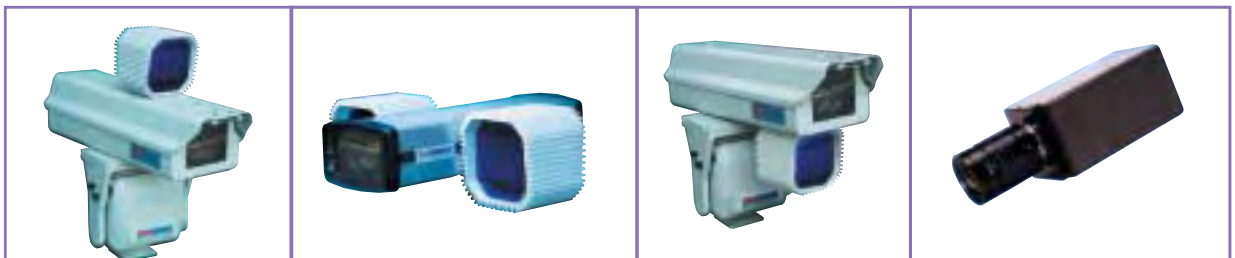


Additional Features

- **Active Infrared Imaging:** Realize real-time, all weather imaging via active infrared detector.
- **Visible Light Imaging:** The system switches to visible light mode automatically if the luminance is sufficient.
- **Extensive Function:** Not only can it monitor normal visible light images, but it can also image in rear-light and complete darkness situations. This gives the observer the ability to evaluate the entire situation under all conditions.
- **Install/Uninstall Flexibility:** The system can be easily installed in many configurations to suit your every need.
- **Distinguish Images and Sound Alarm Automatically:** The system can automatically monitor, distinguish images, sound an alarm, record and activate appropriate security devices. The digital hard disk can record data over long periods.
- **Multiple Monitoring:** One or several observers at different locations can monitor single or multiple camera sites. Monitoring can also be established according to the authorization levels of the observers.
- **Complete Information Management:** Archive management is made simple by the intelligent search technology incorporated into the software and hardware. The system provides 16 levels of authorization, and each level manager can have a different authorization code for security purposes.
- **Efficient Compression/Decompression for Images:** Advanced image compression and decompression techniques are used to accommodate live transmission of the images via the Internet (at 30 frames per second). This minimizes the network flow capacity.
- **Reasonable System Structure:** We have created an advanced structure so that the system has perfect expansion ability and maintainability.
- **Analog and Digital Compatibility**

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The Main Active Infrared Products



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Technical Specifications of Active Infrared Products

Infrared Illuminators

Item	Model	Angle(deg)	Wavelength(mm)	Voltage/power	Dimension(mm)
01	CSI- IR12m	30	850	DC12V/ 3W	131 x 131 x 120
02	CSI- IR15m30	30	850	220V/ 110V/ 6W	131 x 131 x 120
03	CSI- IR15m60	60	850	220V/ 110V/ 12W	131 x 131 x 120
04	CSI- IR30m30	30	850	220V/ 110V/ 12W	131 x 131 x 120
05	CSI- IR30m60	60	850	220V/ 110V/ 20W	131 x 131 x 180
06	CSI- IR50m30	30	850	220V/ 110V/ 20W	131 x 131 x 180
07	CSI- IR50m60	60	850	220V/ 110V/ 30W	131 x 131 x 200
08	CSI- IR100m30	30	850	220V/ 110V/ 30W	131 x 131 x 200
09	CSI- IR150m30	30	850	220V/ 110V/ 42W	165 x 165 x 200
10	CSI- IR200m10	10	850	220V/ 110V/ 42W	165 x 165 x 200
11	CSI- IR15m30N	30	940	220V/ 110V/ 12W	131 x 131 x 120
12	CSI- IR15m60N	60	940	220V/ 110V/ 20W	131 x 131 x 120
13	CSI- IR30m30N	30	940	220V/ 110V/ 20W	131 x 131 x 180
14	CSI- IR30m60N	60	940	220V/ 110V/ 30W	131 x 131 x 180
15	CSI- IR50m30N	30	940	220V/ 110V/ 30W	131 x 131 x 200
16	CSI- IR50m60N	60	940	220V/ 110V/ 42W	165 x 165 x 200
17	CSI- IR100m10N	10	940	220V/ 110V/ 42W	165 x 165 x 200

Infrared Sensitive Cameras

Item	Model	Image Sensor	Resolution	Signal/Noise	Synchronous System
01	CSI- 901B	1/ 3" CCDB/ W0. 1Lux	420TVL	≧ 6dB	External Sync.
02	CSI- 902B	1/ 3" CCDB/ W0. 01Lux	600TVL	≧ 8dB	External Sync.
03	CSI- 903B	1/ 2" CCDB/ W0. 0001Lux	570TVL	≧ 8dB	External Sync.
04	CSI- 904C	1/ 3" CCDB/ W0. 01Lux	480TVL	>48dB	External Sync.
05	CSI- 905C	1/ 2" CCDB/ W0. 01Lux	480TVL	>48dB	External Sync.
06	CSI- 906C	1/ 2" CCDB/ W0. 005Lux	480TVL	>48dB	External Sync.

Integrated Infrared CCTV Camera Systems with Optional Pan/Tilt/Zoom

Item	Model	Wavelength(mm)	Angle(deg)	View Distance(m)
01	CIRP100m	850	30	100
02	CIRP200m	850	10	200
03	CIRP400m	850	10	400
04	CIRP600m	850	10	600