Intelligent Surveillance Solution: WISE + iCAM IP Camera

A general surveillance system on current market usually features separated systems: the camera DVR/NVR as a system, and the I/O monitoring as another system; each system operates independently. For now the DVR/NVR system of the camera usually records video for 24H/7Day without interruption, it requires huge storage space and sufficient network bandwidth; therefore the system implementation fee is usually high. In addition, when playback a certain video, it does not allow to search the suspicious activities of related I/O (temperature, doors and windows switch, water level, etc.) at the same time.

ICP DAS WISE surveillance solution integrates logic control, I/O, camera and data log in one single WISE controller. WISE allows two-way interactions between the I/O and the camera; it enables to record a piece of video or to take images when there is an event triggered by either I/O condition or ROI (Region of Interest) by camera. In this way, the storage size can be reduced significantly and the connection between I/O event and Video/Image can be built for easy query.

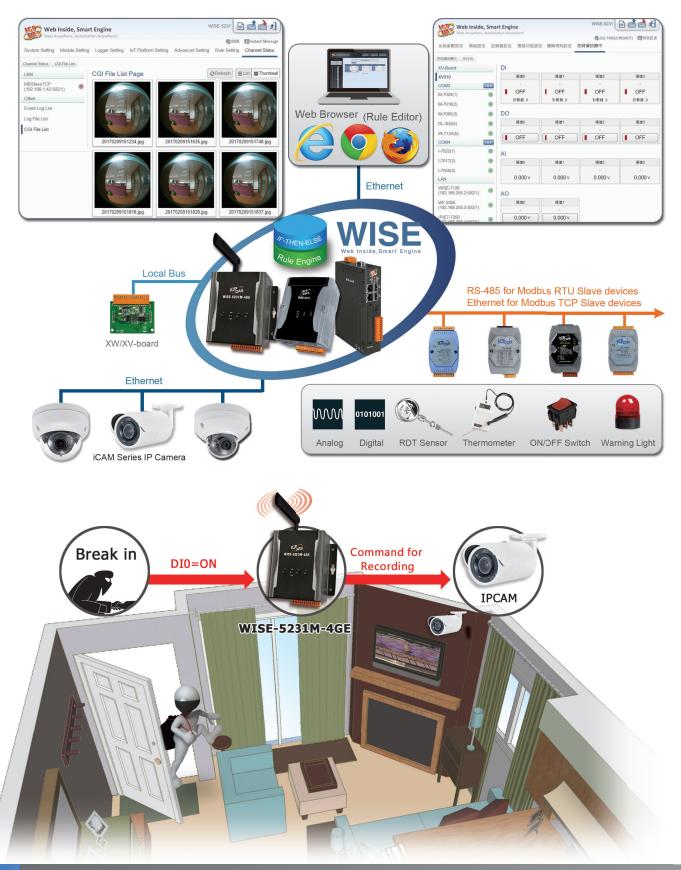
ICP DAS WISE Surveillance Solution	Regular Surveillance Solution	
1. One WISE controller to integrate camera and I/O	1. Two independent systems: SCADA & DVR/NVR	
2. Records key video and image, only needs a few storage memory.	 Record video 24H/7Days, needs huge storage memory. 	
3. Two-way interaction between I/O and Video/Image	3. I/O and Video/Image are independent	
4. Can work stand along or be integrated into a SCADA system	4. Needs a host PC to run the SCADA	
 5. One stop shopping/service for Controller: WISE Series I/O Modules: Various options for RS-485, Ethernet interfaces Camera: iCAM Series IP Camera SCADA: InduSoft 	5. Buy from different venders for SCADA, I/O Modules, DVR/NVR	
InduSoft	SCADA	

ICP DAS Website: https://www.icpdas.com



Perform Interlocking Operations of I/O & Video Recording by IP Camera

WISE-523x/WISE-2x4xM supports ICP DAS iCAM IP Camera series. Users can trigger the connected IP camera to perform snapshot or video recording with IF-THEN-ELSE logic rules. WISE-523x/WISE-2x4xM provides the IP Camera Status webpage to display the event list ordered by time, and you can just click and play the images or videos on the browser. In additional, WISE-523x/WISE-2x4xM provides remote backup mechanism to upload images and videos to the remote FTP server automatically.



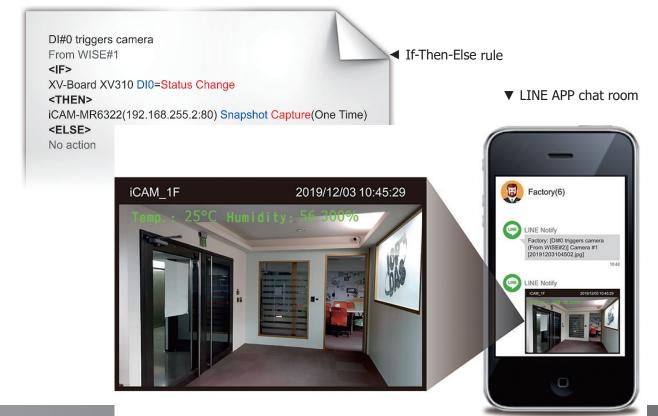
OSD (On Screen Display)

- WISE-523x/2x4xM can connect with iCAM series IP cameras. There are two methods to get images and videos:
- (1) If-Then-Else rule sends commands to trigger camera to take snapshots and/or a video.
- (2) Camera takes snapshots and/or a video when senses motion event. And then sends the snapshots and/or video to the WISE controller.



• OSD with camera name, time stamp and user's defined text message.

WISE controller has to sends 2 LINE notifies to delivery completed information.





IP Camera : iCAM Series

Auto Focus IR IP Bullet Camera



Features

- Full HD 2.0 megapixel CMOS image sensor
- 1080P True H.264 AVC High Profile video compression
- H.264 and Motion JPEG multi-profile video streaming
- Auto focus with zoom / focus motorized lens
- 3D noise reduction (MCTF), 2D WDR function
- HDR function up to 100dB
- Digital PTZ and ROI (Region of Interest) supported
- Day and Night IR-cut removable LED, radiant distance up to 30m
- Built-in 4GB MicroSD Card
- ONVIF Profile S supported
- IP67-rated Housing

iCAM-ZMR8422X is a day & night 2MP auto-focused vandal resistant bullet IR IP camera. It features a full HD 2.0 megapixel CMOS image sensor. The camera has built-in IR-cut filter which allows clearer images at day and night operations even in the low lux condition.

The high efficiency IR LED radiant distance can extend up to 30 meters. Its auto-focus feature allows users to automatically focus the camera from a distant location. With motorized lens, all you need to do with zoom/focus adjustments is simply a click on browsers. Support with privacy mask, 3D noise reduction, 2D WDR function, and HDR function up to 100dB, it's easier implement iCAM-ZMR8422X into a range of environments such as retail, home, office, residential premises and hotel security.



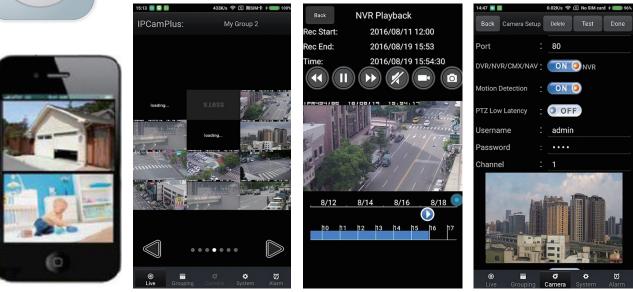
iCAM-MR6422X/iCAM-MR6322 is an HD 30M-Rage IR Varifocal/Fixed Dome IP Camera in the M features 1080p at 30 frames per second, built-in Sense up+ technology to deliver stunning video in low-light conditions, and intelligent video surveillance (IVS) functions. Utilizing intelligent image signal processing, HDR, AGC control, and 3D Noise Reduction, the combination successfully delivers the ultimate low-light image without motion blur. The support of PoE, 4 privacy masking, white balance, as well as the minimum illumination 0.117 Lux at F1.4 for iCAM-MR6422X and the minimum illumination 0.13 Lux at F2.0 for iCAM-MR6322.

Model	iCAM-ZMR8422X	iCAM-MR6422X	iCAM-MR6322
Lens/Night vision (i	nfrared LED)		
Focal Length	Vari-Focal: 2.8 to 8 mm	Vari-Focal: 2.8 – 8 mm	Fixed-Focal: 4 mm
Aperture	F1.6, Bullet	F1.4, Dome	F2.0, Dome
Angle of View	Horizontal: 102.3° W–51.6° T Vertical: 51.3° W–24.9° T Diagonal: 128.2° W–57.3° T	Horizontal: 102° W–34° T Vertical: 54° W–20° T Diagonal: 122° W–39° T	Horizontal: 90° Vertical: 45° Diagonal: 107°
Beam Spread	60°	60°, 90°	60°
Radiant Distance	30 M		
Infrared Cut Filter	Auto/Day(Color)/Night (Mono)/Schedule		
Image Sensor	1/2.7" CMOS image sensor		
Video Streaming			
Protocol/ Video Compression/ Number of streams	RTSP, RTCP, ONVIF Profile S, H2.64 & MJPEG, 4 configurable streams, configurable frame rate and bandwidth, multi-profile video streaming		
OSD (On Screen Display)	Text overlay for date, time, camera name and user defined text		
General			
IP Rating	IP67		
Certifications	CE, FCC(EMI CLASS B)		
Encryption	Base64 HTTP encryption, HTTPS encryption		
Dimension(mm)	68(W) × 69(H) × 214(D) mm	Ø 120 × 106(H) mm	Ø110 × 89(H) mm

Support Android & iOS Mobile APP: IPCAMPlus



iCAM-ZMR8422X/iCAM-MR6422X / iCAM-MR6322 provide smart phone APP for Android and iOS platform. Apps allow you to catch the firsthand notifications and to take over all event situations in real-time. Furthermore, using the App can also allow you to reward the recorded video remotely. While the alarm is triggerred, App will send a notification message to the user immediately.



Smart Phone Integration Solution:

WISE + Sensor +



The **WISE-523x/WISE-2x4xM** series is the **IIOT Edge Controller** designed by ICP DAS for industrial IoT application. In addition to the simple, easy-to-use, flexible and full-featured features of the past, the new features of Instant Messaging (IM) technology with Mobile phone were also released. The I/O data and pictures taken by the WISE/Camera can be instantly pushed to the LINE/WeChat contacts and chat rooms on the smart phone. Please note: WISE-284xM also supports Telegram.



WISE message notification to smart phone

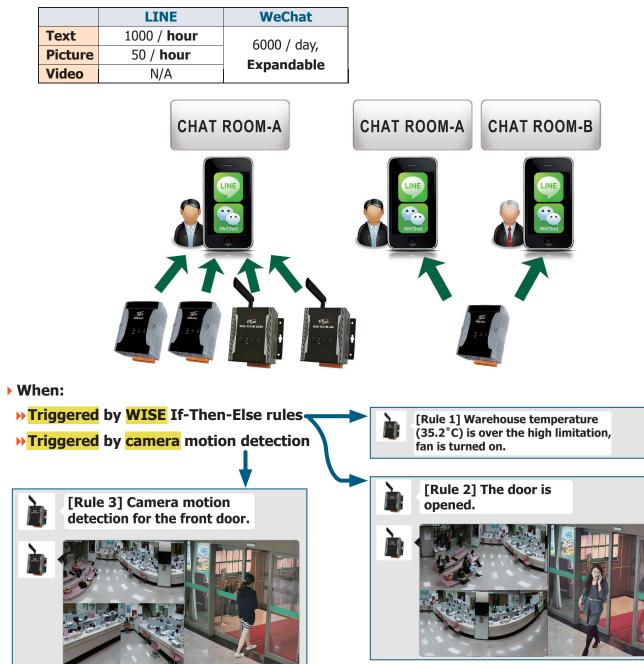
•SMS : Sends alert messages and receives commands

- The same SMS can be sent to multiple phone numbers
- The same SMS can include multiple variable values (SMS < 160
- Phone number must be authorized to send SMS commands

•LINE/WeChat: Sends alert messages and picture

- Object: Contact, Chat Room
- Content:





☑ WeChat Function Using Note

An Enterprise WeChat account in China is required for WISE to send the messages to the members under the enterprise WeChat account.



Smart Access Control Solution: WISE IIoT Edge Controller + Access Control Reader + Camera + Alarm



ICP DAS Smart Access Control System can solve problems of traditional systems. In traditional systems, the controllers need to be developed by professional software engineers, and the control projects need to collect all statuses of the sensors and handle the communication of the I/O modules. When expanding the system in the future, it needs a lot of human power and time to modify the projects, which costs more and gets poor benefits. Moreover, the integration is not easy due to the sensors and image monitoring are mostly separated.

The WISE-523x/WISE-2x4xM IIoT Edge controller in the ICP DAS Access Control System support I-7000/M-7000 I/O modules in default and no programming is required to implement logic content to display the sensor status of the I/O modules on the webpage. The WISE has built-in IF-THEN-ELSE Logic Rule Engine, which can be easily selected on the webpage to complete the access control system. More importantly, the WISE also supports two-way CGI command communication mechanism, which can easily integrate IP camera images.



• Using ACS series card reader to connect M-7000 I/O to achieve multi-group alarm loops

- 1. Multi-condition door access: Supports 3 conditions for door opening card only, password only, or card + password. It can be configured using an access control application or attendance application.
- 2. Provides the PC software for authorization and password management, and supports updating card recorder information to a remote database via an Ethernet connection.
- 3. Supports electric door lock control and allows you to connect this via an M-7000 I/O module to detect trigger conditions for the WISE if-then-else logic control.
- 4. WISE supports most M-7000 I/O modules, so you can select a module from the supported list that can be found on the WISE WEB page, and WISE will automatically create the corresponding WEB UI and handle the communication, meaning that you can directly obtain the module data from the WISE WEB page.



▲ Swipe card -> DO output to M-7000 -> WISE if-then-else logic -> Set to Alert or Normal



◄ The M-7041 module transmits the data from door/window sensors and infrared motion detectors to the WISE-523x.

• WISE provides logic control to achieve the access control, camera capture and the alert notify of the mobile phone

- The WISE logic control function can set the status of I/O module as a logical control condition: Using the WISE logic control function can implement the access control function easily by clicking on the webpage without any additional programming.
- 2. WISE uses CGI commands to let iCAM capture images with the simple and fast setting.

