

## Description for FS-613A-M105

### **Brief introduction**

FS-613A-M105 is a IP camera which is a combination of analog camera & IP video technology. It adopts embedded chip and embedded real-time operating system. Despite all functions which analog cameras have, IP camera can compress and encrypt video and audio signal then send them to remote terminals with its built-in processor and web server. Remote viewers can realize real-time monitor just via standard web browser (such as Microsoft IE or Netscape), no need to install any professional software. What's more, users can take a snapshot, record, even can email or ftp upload the picture when the motion detection alarm is being triggered.

### **Features**

- Support 10 languages,9-ch view via IE browser,
- Built-in DDNS system, visit the ip camera more convenient via free domain name
- IR night vision 20m
- Wi-Fi compliant with wireless standards IEEE 802.11b/g
- Support most of the intelligent cellphone(such as Iphone,Android,Windows mobile) view
- Support motion detection, external alarm output, and Email photo, FTP photo , FTP record, when alarm is triggered.

### **How does it work?**

1. Receive the image signals from lens and the audio signals from microphone.
2. A/D converter transfer the audio analog signal into digital signals.
3. Image and audio coder implement the digital signal coding according to coding standard.
4. Web server will send the digital signals which have been coded to the internet with the guide of the controller, the controller also can receive the alarm signal and send it as the order.

Here we list the details of principles:

### **Work principle of Video capture**

Firstly, COMS sensor RC360 capture the images, secondly video coder RC301 code the captured image into Motion-JPEG-G format, thirdly the USB interface will hand

Motion-JPEG-N video to CPU(W90N745CDG ) for processing, finally the video can be transmitted via Internet(TCP/IP protocol.)

### **Work principle of audio talkback**

Firstly the microphone capture the analog audio signals, then RC8731 will implement AC97 code and output it to CPU(W90N745CDG) for processing, after that the audio can be transmitted via internet(TCP/IP protocol).As the same principle, when the audio from the computer is transmitted to the IP camera, RC8731 will implement AC decoding the digital signal into analog signal and then drive the speaker to make sound.

### **Work principle of GPIO alarm**

Two alarm modes:

- (1) Alarm is triggered by external alarm trigger: Connect a alarm trigger to GPIO interface, when the alarm trigger work, the GPIO will input the alarm signal into the CPU , then by setting the software to decide whether ouput the alarm or not.
- (2) Alarm is triggered by motion detection function: By setting the software to decide whether to output the alarm via GPIO from CPU.