FW3170 User's Manual

(Product Guide)

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About This Document

This document is prepared for users of FW3170 supplied by Seyeon Tech Co., Ltd. It is assumed that the users are familiar with Microsoft Windows operating systems and Web browsers such as Internet Explorer. It is also assumed that the users are well aware of how to install and use the network equipment such as LAN, Hub, router, and having basic knowledge of network terminologies. If you have any questions regarding network installations, please contact your network equipment vendor or network administrator or Internet service providers.

For updated contents, detailed features and other applications from Seyeon Tech, please refer to the user's manual in CD-ROM provided with the product you purchased, or visit Seyeon Tech's Internet homepage at http://www.flexwatch.com/.

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1. Product Overview

1.1. FW3170

FlexWATCH® 3170 is 1ch network video server which transmits digital images captured by Analog CCD camera over IP network.

It can transmit up to 30fps@D1 over the existing network. You can monitor video of FW3170 through web browser(ie. MS Internet Explorer), if FW3170 is connected to network. FW3170 supports video compression both Motion-JPEG and H.264 simultaneously so that user can choose appropriate video compression for the purpose. For both Motion-JPEG and H.264, FW3170 provides 6 levels of video quality.

FW3170 server is state-of-the art device and leads new generation of monitoring and security solution.

Picture 1 : FW3170

1.2. Key Features

- Standalone device with a built-in web server
- 10M/100M Auto-Sensing Ethernet
- Configuring and controlling through Web browser
- Max 30/25 fps transmission rate at D1 resolution in NTSC/PAL
- Effective Bandwidth & Bit-rate Control (VBR/CBR) by H.264
- Supports Dual Streaming in MJPEG and H.264
- Compressed audio transmission for each channels
- Audio decoding for one channel
- Support Dynamic IP network by IPCCTVDNS Server
- Support various PTZ (Pan/Tilt/Zoom) devices
- Support Sensor Input and Digital Output
- Support Transparent Mode
- Support SNMP function
- Encryption on user authentication level
- Image transmission via dunction FTP and Email
- Support both ONVIF/PSIA

1.3. Technical Specification of FW3170

Hardware	32bit Embedded CPU Flash 8Mbytes /SDRAM: 128Mbytes Linux version 2.6.18 operating system Battery backed up real-time clock
Video compression	MJPEG H.264
Resolution	NTSC : 720x480, 704x480, 352x240, 160x112 PAL : 720x576, 704x576, 352x288, 160x144
Frame rate (each channel)	Up to 30/25 fps at D1 (Secondary Stream at QCIF)
Video Streaming	MJPEG and H.264 Dual Streaming (Simultaneously) Controllable frame rate and bandwidth
Image setting	Compression levels: 6 (MJPEG/H.264) Color : color, black & white
Audio	8 bit PCM(G.711-u-low), Sampling rates 8KHz, Mono Audio 1ch in & 1ch out
LAN interface	10/100Base-T ethernet auto sensing
Alarm I/O Interface	1 photo-coupled input and 1 relay output
Video Input	1 channel composite video input
Video Output	1 loop through analog video outputs
Serial Interface	RS-232(COM Port) S-485 DI/DO Max Baudrate: 115200 bit/s
Security features	Multi user level protection for camera access, PTZ, Alarm I/O
Advanced Service	Up to 5.6M memory for Pre/Post alarm buffer E-Mail, FTP, IP notification, Alarm Notification to e-mail CGI Call by event or schedule
Built-in Motion detections	Accuracy : 12x12=144 blocks Motion Sensitivity : -100 ~ 100 : 100 is hypersensitive
PTZ & UART Control Support	PTZ and UART device control through serial interface Up to 35 PTZ protocols from Pelco "P" & "D" protocol, Vicon V1311RB, Samsung, Honeywell and Etc., X10 device control
Others	Transmit Serial input data transfer with Video IP notification by e-mail
Management	Configurable by serial, web or telnet Remote system update via telnet, FTP OR web browser.
Developer support	Provides HTTP CGI API ActiveX control development kit

PWR Supply	SMPS Input: 100~240VAC, 300mA Output : DC 12 Volt, 1A
PWR Consumption	DC 12Volt, 0.5mA
Operating Environment	Temperature : 32°~ 122℉ (0°~ 50℃) Humidity : 20 ~ 80% RH(non-condensing)
Miscellaneous	Work with Smart NVR(CMS software) Dynamic IP support through IPCCTVDNS Server
Users	16 simultaneous users
Installation, management and maintenance	Installation CD and web-based configuration Firmware upgrades over HTTP, telnet or FTP, firmware available at homepage
Video access from Web browser	Video access from Web browser
Minimum Web browsing requirements	Pentium 4, 2 GHz, 2GB(RAM) or higher Video Card: 256MB RAM, 1024x768 resolution or higher 100Mbps Network Adaptor or faster Windows XP Pro or later Internet Explorer 6.x or later
System integration support	Powerful API for software integration available at http://www.flexwatch.com, including Simple Viewer API, FlexWATCH Control SDK, event trigger data in video stream, embedded scripting and access to serial port peripherals over HTTP/TCP User can be installed user program daemon for event notification or sending image Embedded operating system: Linux 2.6
Supported protocols	HTTP, RTP/RTSP, TCP/IP, FTP, Telnet, RARP, PPPoE, SNMP, PAP, CHAP, DHCP, NTP, SMTP client
Approvals	KCC FCC : Class A CE : Class A RoHS
Dimensions (HxWxD) and weight	85(W) x 110(D) x 39(H) (in mm) About 0.214kg without power supply

* All specifications are subject to change without prior notice.

Table 1 : FW3170 Specification

1.4.   FW3170 Packing List

FW3170's packing box includes the following items.

FW3170	1ea	
Power Supply Unit (Power Cable & SMPS DC12V 1A Adapter)	1ea	
CD (User's Manual, IP Installer and etc)	1ea	

Table 2 : FW3170 Packing List

☞   *Please check all the listed items are included in your package. For any missing items, please contact your local distributor.*

2. Hardware Description

2.1. FW3170 Front View

Picture 2 : FW3170 Front View

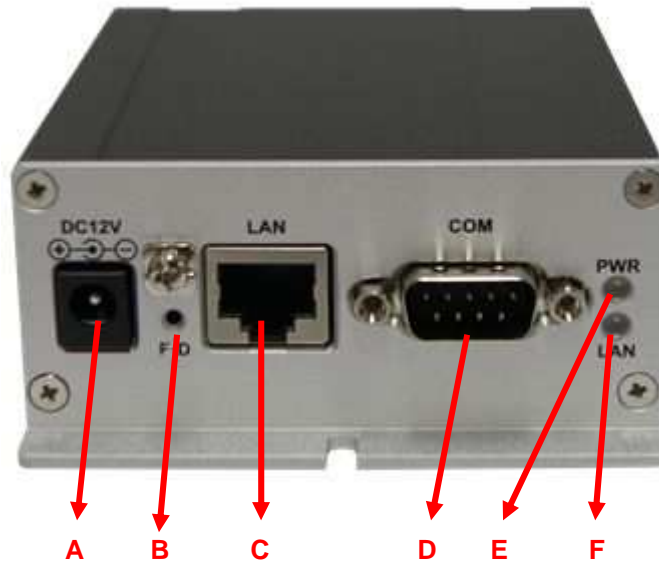|	Name	Description
A	Video In	BNC cable port for 1ch Video input.
B	Video Out	1ch Video Output port displaying on Analog Monitor.
C	MIC, SPK	1ch Audio Output and Input
D	RS485	RS-485 Ports for PTZ
E	DI (SENSOR)	Signal input ports for sensor and contact.
F	DO (ALARM)	Signal output ports for alarm and light.

Table 3 : FW3170 Front Panel

2.2. FW3170 Rear View

Picture 3 : FW3170 Rear Panel

	Name	Description
A	Power	Power input ports for DC 12V 1A [SMPS]. Ensure to use the original power supply unit from the package.
B	Factory Default Button	This button can reset the factory default settings at the system. Especially when a user lost his/her admin-password, or when it got any uncertain faulty operation. - After reboot the system, wait until hearing two times of beep sound. - Keep pressing FD button for 5~10 seconds until hearing three times short beep sound. ACT LED blinks during the process. The system will reboot automatically when it's completed.
C	LAN	LAN Port for 10/100M Base T Auto sensing.
D	COM	RS-232 ports for Serial input device, Console (HyperTerminal connection).
E	POWER LED (RED/GREEN)	RED light – It blinks RED when power on. GREEN light – It blinks GREEN when IP setup is done.
F	LAN(Tx/Rx) LED (RED/GREEN)	RED light – It blinks RED when data is being transmitted on the connected LAN port GREEN light – It blinks GREEN only when LAN port is connected without data transmission.

Table 4 : FW3170 Rear Panel

3. FW3170 Installation and Basic Setup

3.1. Before Installation

- Read carefully User's Manual.
- Check User's Network (IP Address, Network Mask and default gateway)
- Secure IP address for FW3170.

3.2. Factory Default Settings

The following table shows the factory default condition. Please refer to this when you need to change the values on admin menu.

	Factory Default
Admin ID	root
Admin password	root
IP address	10.20.30.40
Network mask	255.255.255.0
Gateway	10.20.30.1

Table 5 : Factory Default

Note: Factory default Admin ID and Password are all lower case letters. You can change the password with Capital letters.

3.3. Installing FW3170

For installation of FW3170, please follow the steps below.

1. Place the CCTV cameras in place and connect power supplies.
2. Connect the video output ports of analog CCTV cameras to the video-in ports of FW3170.
3. Connect the FW3170 to the Internet cable through the LAN port.
4. Connect the power supply of FW3170.

After that, you need to follow the steps below.

- Network Configuration: Refer to "IP Installer User's Manual"
- Camera Configuration: Refer to "FlexWATCH Admin Menu User's Manual"
- Service Configuration: Refer to "FlexWATCH Admin Menu User's Manual"