

SRN-1673S 16CH NETWORK VIDEO RECORDER WITH POE SWITCH

TECHNICAL SPECIFICATIONS

SECURITY SYSTEM

DIVISION – 28 ELECTRONIC SAFETY AND SECURITY

LEVEL 1 _28 20 00 ELECTRONIC SURVEILLANCE

LEVEL 2 _28 23 00 VIDEO SURVEILLANCE

LEVEL 3 _28 23 29 VIDEO SURVEILLANCE REMOTE DEVICES AND SENSORS

PART 2 – PRODUCTS

2.01 GENERAL

- A. All equipment and materials used shall be standard components that are regularly manufactured and used in the manufacturer's system.
- B. All systems and components shall have been thoroughly tested and proven in actual use.
- C. All systems and components shall be provided with an explicit manufacturer warranty.

2.02 SRN-1673S 16CH NETWORK VIDEO RECORDER WITH POE SWITCH

- A. The network video recorder (NVR) shall support 16 channels and provide recording rates of 80Mbps. The NVR shall display high-resolution images at a maximum of 8M pixels
- B. The NVR shall offer 16 ports PoE Switch for connecting network camera; Each PoE port can be used as downlink port for camera.
- C. The NVR shall offer 2 network ports for uplink to CMS.
- D. The NVR shall offer combined VGA/HDMI video output for main display; H.264 video compression and G.711, G.726 and AAC audio compression; up to 4 audio inputs, and PTZ control using GUI, Webviewer or SPC-2000.
- E. The NVR shall support network monitoring and integration using Samsung central monitoring system.
- F. All operation and configuration menus shall be provided in several languages, including English, French, German, Italian, Spanish, Russian, Turkish, Polish, Dutch, Swedish, Czech, Portuguese, Danish, Rumanian, Serbian, Croatian, Hungarian, Greek, Norwegian, Finnish, Korean, Chinese, Japanese, Thai.

2.03 DISPLAY

A. N/W Camera

- | | |
|---------------|----------------|
| 1. Inputs | Up to 16CH |
| 2. Resolution | CIF ~ 8M |
| 3. Protocols | Samsung, ONVIF |

B. Live

- | | |
|-------------------------|---|
| 1. Local Display | HDMI / VGA |
| 2. Multi Screen Display | [Local monitor] 1 / 4 / 6 / 8 / 9 / 13 / 16 / Auto sequence,
[Web] 1 / 4 / 9 / 16 / Auto sequence |
| 3. Performance | [Local monitor] 8M (20fps), 5M (30fps), 3M (50fps), 2M (150fps),
720p (240fps), D1(480fps)
[Web] 5M (30fps), 3M (60fps), 2M (120fps), 720p (240fps), D1
(480fps) |

2.04 PERFORMANCE

A. Operating System

Embedded Linux

B. Recording

- | | |
|------------------------|--|
| 1. Compression | H.264, MJPEG |
| 2. Recording Bandwidth | 80Mbps, 2M 16 camera real-time recording |
| 3. Resolution | CIF ~ 8M |
| 4. Mode | Normal, Scheduled, Event (Pre / Post) |
| 5. Event Trigger | Alarm input (8), Video loss, Camera event (Alarm in, MD, Video |

	analytics)
	VA event (Tampering, Enter/Exit, Passing, (Dis)Appear, Face detection, Audio detection)
6. Event Action	E-mail, PTZ preset, Alarm out, Buzzer, Monitor out
C. Search & Playback	
1. Playback Bandwidth	32Mbps
2. Performance	Max. 3 users
3. Search Mode	Date & Time (Calendar) / Event log list / Text search (POS)
4. Simultaneous Playback	[Local monitor] Up to 16CH [Web, CMS] Up to 16CH
5. Resolution	CIF ~ 8M
6. Fish-eye Dewarping	Via Smartviewer
7. Playback Control	Fast/Slow Forward/Backward, Move one step up/down
D. Storage	
1. Default Built-in	2TB
2. Internal	4 SATA (HDD removable at front)
3. External (DAS)	1 e-SATA
4. Max. Capacity	Internal 16TB
E. Back up	
1. File Backup	BU/EXE (USB), JPG/AVI (Web, CMS)
2. Function	Max. 16CH playback, Date-time/title display
F. Sensor (Input/Output)	8 / 4 (NO 3ea, NO/NC 1ea)
G. Audio	
1. Input	16CH (Network)
2. Compression	G.711, G.726, AAC (16/48KHz)
3. Audio Communication	2-way

2.05 NETWORK

A. Protocol Support	TCP/IP, UDP/IP, RTP (UDP), RTP (TCP), RTSP, NTP, HTTP, DHCP (Server, Client), PPPoE, SMTP, ICMP, IGMP, ARP, DNS, DDNS, uPnP, HTTPS, SNMP, ONVIF (Profile-S)
B. DDNS	Samsung iPOLiS DDNS
C. Transmission Bandwidth	Max. 160Mbps
D. Max. Remote Users	Search 3 / Live unicast 10 / Live multicast 20
E. IP	IPv4 / IPv6
F. Security	IP address filtering, User access log, 802.1x authentication, Encryption (ID/PW, Recording, Transmission, Back up)
G. Language	English, French, German, Italian, Spanish, Russian, Turkish, Polish, Dutch, Swedish, Czech, Portuguese, Danish, Rumanian, Serbian, Croatian, Hungarian, Greek, Norwegian, Finnish, Korean, Chinese, Japanese, Thai
H. OS	Window XP (Service pack 2 or above), Vista, 7, 8, Mac OS X (10.6 or above)
I. Web Browser	Microsoft Internet Explorer (Updated Ver. 8 ~10, IE 9 or higher recommended) Mozilla Firefox (Ver. 19.x or above), Google Chrome (Ver. 26.x or above), Apple Safari (Ver. 6.0.3 or higher)
J. Viewer Software	
1. Type	SSM, Webviewer, SmartViewer, iPOLiS mobile viewer

2. CMS Support	SDK / CGI (SUNAPI)
2.06 FUNCTIONS	
A. Camera Setup	
1. Register	PnP mode, Manual mode
2. Setup Items	1) IP address, Add profile edit, Bitrate, Compression, GOP, Quality 2) Camera MD setup 3) Video setup (Simple focus, Brightness/Contrast, Flip/Mirror, IRIS, WDR, D&N, SSNR, Shutter, SSSDR, DIS, etc)
B. Camera Control	
1. PoE	1) Monitor PoE power consumption 2) On/Off control for each PoE camera 3) Remote reset for each PoE camera
C. Easy Configuration	Setup Wizard (Date/Time, Network, Auto camera configuration)
D. PTZ	
1. Control	Via GUI, Webviewer, SPC-2000
2. Preset	255
E. Smart phone	
1. OS	Android, iOS
2. Control	Live (4CH) / Playback (1CH)
F. System Control	Mouse, IR Remote controller, Web, SPC-2000 (USB controller)
2.07 INDICATOR / INTERFACE	
A. Front	
1. Indicator	Power status LED 1ea, HDD action LED 1ea, Alarm status LED 1ea Record status LED 1ea, Network action LED 1ea, Back up LED 1ea
2. USB	2ea (Front 1ea / Rear 1ea)
B. Connections	
1. VGA/HDMI	1ea / 1ea
2. Audio	Out 1ea (RCA, Line)
3. Ethernet	16ea (PoE/PoE+, 100Mbps) - 8 PoE+ when 2 PoE ports aggregated to 1 port - Each PoE port can be used as downlink port for camera / PoE Hub 2ea (LAN/WAN, 1Gbps) - LAN : Downlink to camera / PoE Hub - WAN : Uplink to CMS
4. Alarm	In 8ea (Terminal block) / Out 4ea (Terminal block)
5. Reset	Yes (Factory reset, Alarm reset)
2.08 SYSTEM	
A. Log List	Max. 20000 (System log, Event log each)
2.09 GENERAL	
A. Electrical	
1. Input Voltage / Current	100 ~ 240V AC
2. Power Consumption	Max. 309W (NVR w / 4 x HDD, PoE on), 57W (NVR w / 4 x HDD, PoE off)
3. PoE Budget	Max. 200W

B. Environmental

- | | |
|--------------------------|-------------------------------|
| 1. Operating Temperature | +0°C ~ +40°C (+32°F ~ +104°F) |
| 2. Operating Humidity | 20% ~ 85% RH |

C. Mechanical

- | | |
|-----------------------|---|
| 1. Color / Material | Black / Metal |
| 2. Dimensions (WxHxD) | 440.0 x 88.0 x 384.8mm (17.32" x 3.46" x 15.15") (2U) |
| 3. Weight | 5.6Kg (12.35 lb) (1TB HDD included) |

D. Accessories

- | | |
|---------------------------------|---|
| 1. IR Remote Controller / Mouse | Included / Included |
| 2. Viewer CD / IB | Backup Viewer, Installation Manual / Included |
| 3. Power Cord | Included |
| 4. Terminal Block | Included |

2.10 CERTIFICATIONS

- A. CE mark
- B. FCC mark

2.11 WARRANTY

- A. 3 years, parts and labor.