Specifications

A. IP Camera & Fixtures

- 1. 4 Mega Pixel Color Outdoor IP IR Bullet Camera or better
 - 1/3.2" 4Mp Aptina CMOS or better
 - H.264/MJPEG & dual-stream encoding,
 - 20fps@4M(2688 x 1520),25/30fps@3M(2304 x 1296) or better
 - Multiple network monitoring: Web viewer, CMS(DSS/PSS) & DMSS
 - 3.6mm fixed lens (6mm optional)
 - IP67, PoE or better
 - WDR(120dB) or better, Day/Night(ICR), 3DNR, AWB, AGC, BLC, HCL
 - Max. IR LEDs Length 40m or better, Smart Detection support
 - VBR/CBR to control the bandwidth (preferred)

(Preferred Brand: Honywell/Bosch/Panasonic/Dahua) (One Year Onsite Comprehensive warranty)

- 2. 1.3 Mega Pixel Color Outdoor IP IR Bullet Camera
 - 1/3" 1.3Megapixel progressive scan CMOS or better
 - H.264&MJPEG dual-stream encoding
 - 25/30fps@1.3M(1280×960) or better
 - DWDR or better, Day/Night(ICR), 3DNR, AWB, AGC, BLC
 - Multiple network monitoring: Web viewer, CMS(DSS/PSS) & DMSS
 - 3.6mm fixed lens (6mm optional)
 - Max. IR LEDs Length 20m or better
 - IP67, PoE or better
 - VBR/CBR to control the bandwidth (preferred)

(Preferred Brand: Honywell/Bosch/Panasonic/Dahua) (One Year Onsite Comprehensive warranty)

3. Switch

Layer 2 Managed Switch

• 1000 BASE-TX 24-port, 2 SFP GB port PoE Switch Equivalent (Preferred Brand: Cisco/Allied Telesis)

(Three Year Onsite Comprehensive warranty)

B. Monitoring & Storage

- 4. Centralized Surveillance Management System
 - Supply of Linux Embedded Based General Surveillance Management Centre
 - Embedded device, 7*24 stable operation
 - High Performance stream media transfer and storage capability
 - Support distributed and cascade deployment
 - Support local storage and IP-SAN storage
 - Support GIS map(Google, Raster Map)
 - Support 1000 ONVIF standard protocol connection
 - Support hot standby
 - Front panel can displays system service status
 - Support POS function
 - Support People counting statistic
 - Support VDP, through SIP Server
 - Support 2000 channels (Support 500 input devices)
 - Support 2000 devices to auto-Register
 - Support unlimited accounts management and 10,000 online users
 - Support 1400M transfer capability and local storage
 - Support 20 distributes server and 5-level cascade
 - E-map max displays 200-channel on one screen
 - Process 1000-channel alarm per second.
 - Client support 4K signal decoding
 - Main Processor: Intel Core I5 64 bits, 4 Core Processor
 - Operating System: Embedded Linux
 - Motherboard: Embedded Board (support 7*24 operation)
 - Support 6TB to 96 TB SATA with 96 TB storage devices (RAID preferred) redundant power supply (Surveillance HDD)
 - Memory: 8GB DDR3

(Preferred Brand: Honywell/Bosch/Panasonic/Dahua) (Three Years Onsite Comprehensive warranty)

5. 2 TB External HDD

(Preferred Brand: Seagate / Western)

(Three Years Onsite Comprehensive warranty)

6. 55 "Professional Display

Model	55" LED
Screen Resolution	1920x1080p
Video Processing Engine	X-Reality PRO
Internet Connectivity	LAN
LICD Dis-	Yes (USB viewer supports FAT16, FAT32, exFAT and NTFS file
USB Play	systems.)
Additional Video Features	Full HD, Motion flow XR 200 Hz, Live Colour, Deep Color, Intelligent MPEG Noise Reduction, MPEG Noise Reduction, Advanced Contrast Enhancer (ACE), 24P True Cinema, PhotoTV HD, TV Screen Format- Auto Wide/ Full/ Normal/ Wide Zoom/ Zoom/ Caption/ 14:9/ PC: Full 1/ Full 2/ Normal, Picture Mode- Vivid, Standard, Custom, Photo-Vivid,
	Photo-Standard, Photo-Original, Photo-Custom, Cinema1, Cinema2,
	Game-Standard, Game-Original, Graphics, Sports, Animation
Speakers	2 Full Range (30x60mm) x2
Stereo System	NICAM/A2
Sound Technology	Dolby Digital, Dolby Digital Plus, Dolby Pulse
Additional Audio Features	Sound Enhancer, S-Master, S-Force Front Surround 3D, Simulated
	Stereo, Audio Output Power- 8W+8W, Sound Mode- Standard,
	Cinema, Sports, Music, Game, Compressed Audio
Composite Video Input	2 (1 Rear/1 Bottom Hybrid w/Component)
Component Video Input	1 (Bottom/Hybrid)
USB	1 port
HDMI	1
Ethernet (RJ 45)	2
PC Audio In (Mini Jack)	2
Headphone Jack	1
Digital Audio Output (Optical)	1
Audio Out L-R (Mini Jack)	1
RF Connection Input(s)	1 (Side)
Other Connectivity Features	Ethernet Connection x 1 (Bottom), Analog Audio Input(s) x 2 (1 Rear/1 Bottom), Digital Audio Output(s) x 1 (Bottom), Audio Out x 1 (Side/Hybrid w/HP), Headphone Out x 1 (Side/Hybrid w/Audio Out), MHL (Mobile High-Definition Link)
Additional	CineMotion/Film Mode/Cinema Drive, 3D Comb Filter, BRAVIA Sync, Fast Zapping, Picture Frame Mode, Scene Select- (Photo, Music, Cinema, Game, Graphics, Sports, Animation), Parental Control, Clock, Sleep Timer, On/Off Timer, Teletext, PAP(Variable), TV Guide On-Screen/EPG, Screen Mirroring, TV Side view, Wireless LAN Ready (requires Wi-Fi adaptor UWA-BR100), Wi-Fi Direct, Skype Ready, Internet Video, Facebook and Twitter, Dynamic Backlight Control, Backlight Off Mode, Light Sensor, Power Saving Modes
Approved Makes	Preferred Brand: Samsung/LG/Sony/Dhahu
Warranty	Three Years Onsite Comprehensive warranty

7. Printer

Print quality black (best)	Up to 600 x 600 x 2 dpi (1200 dpi effective output)
Duty cycle (monthly, A4)	Up to 5000 pages
Print technology	Laser
Processor speed	266 MHz
Number of print cartridges	1 (black)
Paper handling input, standard	150-sheet input tray
Paper handling output, standard	100-sheet output bin
Duplex printing	Manual (driver support provided)
Media sizes supported	A4; A5; A6; B5; postcards; envelopes (C5, DL, B5)
Media types	Paper (laser, plain, photo, rough, vellum), envelopes, labels, cardstock, transparencies)
Connectivity, standard	1 Hi-Speed USB 2.0
Compatible operating systems	Windows 8, Windows 7 (32-bit/64-bit), Linux (see hplip.net for current)
Warranty	1 Year Next Business Day Exchange Support

8. Workstation

- Processor : Intel Core i7 Processor 3 GHz; 4 MB L2 Cache; 800 MHz FSB
- Mother Board: Intel Original Chipset
- Memory: 8 GB RAM
- Expansion Slot : Standard Configuration
- I/O Port : Standard IO Ports with 4 USB 2.0 connectors
- VGA Card : NVIDIA 2 GB Graphics Card
- Display Controller : Compatible display controller with at least 64MB onboard memory
- Storage: 1 TB
- Video Accelerator: Matrox RT.X2 Card or equivalent
- Ethernet: 10/100/1000, Auto Negotiating Ethernet controller
- OS: Windows 7/8/10 (32 bit or 64 bit)
- Preferred Brand: HP/Dell

(Three Years Onsite Comprehensive warranty)

- 9. 64 GB USB Pen drive (Preferred Brand: HP/SanDisk/Transcend) (One Year Warranty)
- 10. DVD-R/W 4.7 GB/7200 rpm (Preferred Brand: Samsung / Sony)

C. SDC Connectivity & Trenching

- 11. Supply of CAT-6 STP Cable (Brand: Molex / Best Net)
- 12. Supply of CAT-6 UTP Cable (Brand: Molex)
- 13. Supply of 9U Rack with tempered glass front door with lock and key, power strip with fuse and switch, Cable Manager, Fan with tray and fixing charge.

(Preferred Brand: ValRack/HCL) - One Year Warranty