A&E SPECIFICATION

A-47-IR HD 3 MEGAPIXEL NETWORK IR DOME CAMERA
TECHNICAL SPECIFICATIONS

1.1   GENERAL

A. This product shall be manufactured by a firm whose quality system is in compliance with the ISO-9001.

B. All equipment and materials used shall be standard components that are regularly manufactured and used in the manufacturer's system.

C. All systems and components shall have been thoroughly tested and proven in actual use.

D. All systems and components shall be provided with comprehensive repair and spare parts replacement. The manufacturer on warranty and non-warranty items shall guarantee the spare parts and the repair.

E. All systems and components shall have been thoroughly tested and proven in actual use.

F. All systems and components must be in compliance with FCC, CE, UL and RoHS requirements.

G. All materials furnished under this item shall be compliant with 802.3 Ethernet standards.

1.2   HD 3 MEGAPIXEL OUTDOOR NETWORK IR DOME CAMERA

A. The network camera shall offer dual video streams with up to 1.3MP resolution (1280×960) in progressive scan CMOS format, with H.264 video compression.

B. The network camera shall provide true & day night (ICR) low-light capabilities with sensitivity down to 0.19Lux @(F2.0,AGC ON), 0 Lux with IR.

C. The network camera shall support Back-Light Compensation (BLC) with selectable zones.

D. The camera shall offer video compression of H.264 and MJPEG. Dual H.264 streams shall be supported with independent resolution, bit rate and frame rates for the main and sub streams.

E. The network camera shall include embedded Linux OS and support IE and client software for network preview, and be capable of performing firmware upgrades through a network using a software-based device utility or thru the web interface.

F. The network camera shall be equipped with built-in password protection which is not dependent on a server.

G. The network camera shall support standard IT protocols including: TCP/IP, HTTP, DHCP, DNS, DDNS, RTP, RTSP, PPPoE, SMTP, NTP, UPnP, ICMP, IGMP, SNMP, FTP, QoS.

H. The network camera shall support industry standard Power over Ethernet (PoE) IEEE 802.3af for powering the camera over the network in addition to 12VDC local power.

I. The camera shall provide the ability to take snapshot and record video clips from the web interface and store on the local computer.

J. The camera shall support video motion detection with user defined areas and configurable sensitivity levels. In addition, the motion detection shall be supported by an arming schedule with the audible warning, surveillance center notification, email, ftp upload, and alarm output triggered as supported events.

K. The camera's web interface shall permit settings to be exported to and imported from a configuration file via the web interface, API and camera manufacturer's client software.

L. The camera shall conform to ONVIF and PSIA standards for integration with 3rd party video management systems (VMS). The camera may also support custom firmware for specific integration with a 3rd party VMS.

M. The camera shall be compatible with a Video Management Software (VMS) package and Mobile Phone Application from the same manufacturer which is provided free of charge. The VMS shall not be a restricted use version of the manufacturer's full featured version.

1.3   POWER

A. Power Supply   12 VDC ± 10%, PoE (802.3af)
B. Power Consumption   Max. 7W

1.4   CAMERA

A. Image Sensor   1/3" Progressive Scan CMOS
B. Min. Illumination   0.19Lux @(F2.0, AGC ON) ,0 Lux with IR
C. Shutter Time   1/30s to 1/100,000s
D. Iris Mode   Manual
E. Lens   4mm@ F2.0, Angle of view: 75.8°
F. Angle Adjustment   Pan:-30° - 30°, Tilt: 0° - 75°, Rotation: 0° - 360°
G. Lens Mount   M12
H. Max. Image Resolution   2048 × 1536
I. Resolutions supported   Main Stream: (2048×1536)@20fps,
                             (1920×1080, 1280×720) @30fps
                             Sub Stream: (4CIF, CIF, QVGA)@30fps
J. Day & Night   Day, Night, Auto, Schedule, Triggered by alarm input are selectable
K. Sensitivity   If you choose auto day/night switch, you can choose the sensitivity of the switch as high, normal and low
L. Digital WDR   On/ Off
M. BLC Area   BLC area is the area sense the light intensity; Close, Up, Down, Left, Right and Center are selectable
N. Back Light Compensation On/ Off, Zone configurable
O. Digital Noise Reduction Close, Normal Mode and Expert Mode are selectable
P. Noise Reduction Level   For adjusting the noise reduction level and only valid when the DNR function is enabled
Q. Scene Mode: Choose the scene as indoor or outdoor.
R. Rotate Mode: On/ Off
S. Image Settings   Saturation, Brightness, Contrast, Sharpness
T. Image rotation   Mirror(Left/Right, Up/Down, Center, Close)
U. White Balance   MWB, AWB1, AWB2, Locked WB, Fluorescent Lamp, Incandescent Lamp, Warm Light Lamp, Natural Light

1.5   VIDEO SPECIFICATIONS

A. Compression   Main stream: H.264
                             Sub stream: H.264
B. Dual Stream   Yes; Main stream up to 2048 × 1536; sub-stream up to 4CIF
C. Video Bit Rate   32 Kbps ~ 16 Mbps
D. Audio Compression(-S)   G.711ulaw/G.711alaw/MP2L2/G.726
E. Audio Bit Rate(-S)   64Kbps(G.711) / 16Kbps(G.726) / 32-128Kbps(MP2L2)
F. Rate Control   Constant, Variable
G. H.264 profiles   Main profile
H. Max. Frame Rate(main)   20fps (2048 × 1536), 30fps@1920 × 1080, 1280×720
I. Sub-stream   4CIF, CIF, QVGA
J. Users
    1. Unicast   Up to 6 simultaneous users

	2. Multicast	Unlimited H.264
	K. Security Access	Password protected
	L. Software Interface	Web browser view and remote client

1.6   NETWORK

A.	Alarm Trigger	Motion detection, dynamic analysis, tampering alarm, network disconnect, IP address conflict, storage exception
B.	Protocols	TCP/IP, ICMP, HTTP,HTTPS, FTP, DHCP,DNS, DDNS, RTP, RTSP, RTCP, PPPoE, NTP, UPnP, SMTP, SNMP, IGMP, 802.1X, QoS, IPv6, Bonjour (SIP optional)
C.	Security	User authentication, watermark
D.	System Compatibility	ONVIF, PSIA
E.	Communication Interface	1 RJ45 10 M/100M Ethernet port
F.	On-board storage	Built-in Micro SD/SDHC/SDXC card slot, up to 64 GB

1.8   WEB BROWSER REQUIREMENTS

A.	Operating System	PC (Intel® Core® 2 Duo microprocessor, 2.6 GHz) with Microsoft® Windows® XP, Windows Vista®, or Windows® 7
B.	Web User Interface	DirectX for Windows XP, Windows Vista, Windows 7
C.	RAM	2 GB
D.	Ethernet Card	100 Mbps
E.	Web Brower	Internet Explorer® 7.0 or later; Firefox, Chrome
F.	Screen Resolution	1024 x 768 pixels or higher, 16- or 32-bit pixel color resolution

1.9   PHYSICAL

A.	Operating Conditions	-30 °C ~ 60 °C (-22 °F ~ 140 °F)
B.	Humidity, all models	95% or less (non-condensing)
C.	IR Range	Up to 10m
D.	Dimension	3.93"x3.84"x1.83"
E.	Weight	0.55 lbs
F.	Construction	
	a. Body Material	Aluminum alloy
	b. Body Color	White
	c. Screws	Stainless Steel, Security Torx

1.10   CERTIFICATIONS AND RATINGS

A. Regulatory
- a. IEC/EN 61000
- b. IEC/EN 55022
- c. IEC/EN 55024
- d. IEC /EN60950-1
- e. FCC Part 15, Class b
- f. UL/cUL 60950-1
- g. RoHS

B. Ratings
- a. Ingress Protection   IP66
- b. Impact Protection   IEC60068-275Eh, 50J; EN50102, up to IK08

1.11   Warranty

A. 3 years, parts and factory labor