Issue 1.0

**Genie A&E Specification**

WAHD2161A

A group of black and white circles

Description automatically generated with medium confidence

**Edit as required** – this document can be edited and merged where appropriate with other Genie specifier documents for a complete/bespoke solution.

1. **General**
2. This product shall be manufactured by a company whose quality system complies with ISO-9001.
3. All systems and components shall have been thoroughly tested and proven in actual use.
4. All systems and components shall be provided with comprehensive repair and spare replacement parts.
5. All systems and components must be in compliance with FCC, CE and UKCA requirements.
6. All materials supplied under this item shall be compliant with 802.3 Ethernet standards.
7. **Embedded Digital Video Recorder**
8. The digital video recorder (DVR) shall be a high-quality recorder capable of recording up to 24 cameras at no less than WD1. The recording resolution shall be up to 5MP on each channel simultaneously.
9. The DVR shall support 1x HDMI, 1x VGA and 1x BNC output. HDMI is simultaneous with VGA and support output up to 5MP (1920 x 1080) resolution for HDMI and 1920 x 1080p for VGA.
10. The DVR shall offer 5MP synchronous playback, and support image capture and instant playback.
11. The DVR shall be able to bookmark video clips, and offer search and playback by bookmarks, image search and event search, live view, and playback and provide fast switching between views.
12. The DVR shall operate with third-party network cameras fully compliant to ONVIF specifications.
13. The DVR shall include support for 2x 10TB and above HDD installation.
14. The DVR shall be compatible with AutoNAT DDNS, and support remote monitoring on Immix and Sentinel (Monitor) platforms.
15. The DVR shall support NTP (Network Time Protocol) and the IP Manager search utility.
16. The DVR shall support multi-user level management with password protection and secure dynamic password reset capability.
17. The DVR will have the ability to be rack mounted.
18. The DVR shall be capable of a full exportable system log that includes user operation, alarm logging/triggering and system condition.
19. The DVR shall support 5MP recording on every channel of the recorder simultaneously.
20. The DVR shall support live viewing and backup from NVMS2 client software, HTML5 and ActiveX web browsers for all channels in one screen (HTML5 support with firmware version 1.3.6 and above).
21. The DVR shall support live adaption and be able to record mainstream and sub streams simultaneously to speed up remote playback.
22. The DVR shall be able to support up to 16 split-screen live view on connected monitor, and support drag and drop directly to the live view window to automatically adjust displayed camera order.
23. The DVR shall be able to provide a snapshot icon for manual capture during live view and playback.
24. The DVR shall be able to fast forward playback footage up to 16x speed.
25. The DVR shall be able to export and import the system configuration that includes connected IPC devices for easy deployment and management.
26. The DVR shall adopt N9000 Linux based operating system to ensure high stability and security.
27. The DVR shall support automatic lockout if incorrect passwords are used.
    1. **Digital Video Recorder Specifications**
    2. **General**
28. Power Supply: DC12V, 4A
29. Consumption: <15W (Without HDD)
30. Operating System: Embedded Linux
31. Recording Resolution: 5MP Lite / 4MP Lite / 1080p / 1080p Lite / 720p / WD1 / D1
    1. **Video/Audio Input**
32. Video Input: 16CH BNC configurable as CVBS, AHD, TVI, CVI or IP

plus additional 8 IP CH, up to 24CH

1. Audio Input: Up to 32CH IPC audio input
   * 1. **Video/Audio Output**
2. HDMI Output Resolution: HDMI: 3840×2160 @ 60fps / 3840×2160 @ 30fps /

1920×1080 / 1280x1024 / 1024x768

1. VGA Output Resolution: VGA: 1920x1080 / 1280x1024/1024x768
2. Playback Resolution: Live View / Playback: 1CH 12MP/4CH 5MP/9CH 720p/16CH

D1

1. Audio Output: RCA x1
2. Dual Stream: Support
3. Synchronous 16CH, up to 5MP

Playback:

* + 1. **Storage and Backup**

1. SATA: 2x SATA HDD’s up to 10TB for each disk
2. Local Backup: U disk, USB mobile HDD
3. Network Backup: Yes
   * 1. **External Interface**
4. Network Interface: RJ45 10 / 100 / 1000 Mbps x1
5. Network Bandwidth: 64Mbps incoming bandwidth, 96Mbps outgoing bandwidth
6. Serial Interfaces: RS485 (Half-duplex), connect to PTZ or keyboard
7. USB Interface: USB 2.0 x2
8. Alarm Input: 16CH
9. Alarm Output: 4CH
   * 1. **Physical Specifications**
10. Dimension (W x H x D): 300 x 268 x 45 mm
11. Rack Mountable: Yes
    * 1. **Environmental**
12. Working Temperature: -10°C~50°C
13. Working Humidity: 10%~90%
14. **Licensing and Support Agreements**
15. Recorder shall require no licensing fees per channel or device, for basic software.
16. Recorder shall require no software support agreements with the manufacturer.
17. Free AutoNAT DDNS Service
18. **Models**
19. WAHD2161A, Network Video Recorder
    1. **Warranty**
20. 3 years, parts and factory labour inclusive.