Unicorn

Introduction

The Unicorn is an integrated surveillance platform with video input, storage, transfer and device management functions designed specifically for digital surveillance applications. The Unicorn has adopted audio/video compression and decompression, embedded system, storage, network, and technologies and it is suitable for security surveillance scenarios such as residential areas, buildings, campus, hotels, and shopping malls etc.

Key Features

- Stability: Linux OS, dual-BIOS, redundant power, two-server hot standby

- Compatibility: Third-party IP Cameras supported with standard ONVIF

- Access: Browser/Server, Client/Server and mobile clients (both iOS and Android)

- Connection: 1000 device connections, up to 2000 channels of high-definition network videos

- Management: Unified management of NVR, IPC, decoder, network keyboard, cloud devices, alarm control panel and door access control, support devices' configuration import/export

- Storage: Max 16 hard disks and 2 disk enclosures; expandable up to 48 disks with 672TB storage, recording backup, IPSAN storage

- Decoding: Max 16×1080P decoding outputs in three screens, expandable up to 112×1080P in 15 screens with 2 decoding cards inserted

- Service: Live view, playback, sequence, video wall, E-map, two-way audio, and alarm plan

- Reliability: Support of HTTPS, 802.1x authentication, ARP protection, Telnet enabling/disabling, network fault tolerance, multi-IP configuration, load balancing, secure password and IP address filtering

Specifications

Item		Unicorn
Video management	Number of connected cameras per server	1000 devices or 2000 channels 1000 devices connected via Onvif
	Image processing performance	Receive vehicle or face images: 100 images per second *Note: For example, if each device uploads 1 image per second, then 100 devices can be connected; if each device uploads 5 images per second, then 20 devices can be connected*
	Device management	IPC, NVR, decoder(standard/expanded), network keyboard, cloud devices, alarm control panel and door access control
	Number of 3rd-party alarm control panels/access control devices	30
	Numbers of users	1000
	Numbers of online users	300
	Numbers of roles per user	16
	Bandwidth of video input per server	512Mbps
	Bandwidth of video output per server	384Mbps
Decoding	Video compression	Ultra265, H.265, H.264
	Decoding	4×4K@30, 16×1080p@30, 36×720p@30, 64×D1
	Resolution	12MP/8MP/6MP/5MP/4MP/3MP/1080P/960P/720P/960H/D1/2CIF/CIF/QCIF
	Display on video wall	HDMI(×2) and VGA(×1) output; HDMI output supports 4K resolution
	Audio compression	G.711A, G.711μ
	Decoding card (optional)	Max 2 cards supported; models: HDMI4-C and HDMI6-C
	HDMI4-C decoding card	4-ch HDMI outputs, with decoding of 4*4K@60 or 8*4K@30 or 32*1080P@30 or 64*720P@30
	HDMI6-C decoding card	6-ch HDMI outputs, with decoding of 6*4K@60 or 12*4K@30 or 48*1080P@30 or 96*720P@30
Storage	HDD installation	Hot-swappable HDDs Support 16HDDs (3.5", up to 14TB for each)
	RAID mode	RAID0, RAID1, RAID5,RAID6,RAID10,RAID50,RAID60
	Performance of video storage per server	512Mbps/ 256 channels
	Disk enclosure (optional)	Max 2 disk enclosures supported; models: DEU1008 and DEU1016
	DEU1008 disk enclosure	8xSATA interfaces, up to 14TB storage per interface
	DEU1016 disk enclosure	16xSATA interfaces, up to 14TB storage per interface
Play control		1 / 3 / 4 / 5 / 6 / 7 / 8 / 9 / 10 / 13 / 16 / 17 / 25 / 32 / 36 / 64 window display

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	Corridor format	
	Up to 3 auxiliary monitors	
Playback	Play NVR recordings	
	Up to 24 channels for multiple clients; synchronous playback up to 16 channels for single client	
Data Info	Alarm Records	200,000
	Operation logs	200,000
	Face capture records	3 million
	Face alarm records	3 million
	Vehicle pass-through records	3 million
	Parking lot charging records	3 million
	Structured motor vehicle, non-motor vehicle and pedestrian records	3 million
	Access control entry/exit records	3 million
Alarm processing capacity		100/s
System	Main Processor	Intel(R) CPU
	Memory	4GB DDR3L
	Power supply	100-240 VAC (with power on/off switch) Dual-power redundancy
Interface	Network	4×10M/100M/1000M Base-T adaptive Ethernet interfaces 2×1000M SFP optical interfaces
	USB	4×USB3.0
	HDMI	2×HDMI
	VGA	1×VGA
	Serial	1×RS-232 (RJ45), 1×RS-485 (RJ45)
	Alarm input/output	24×alarm inputs, 8×alarm outputs
	Power output	12 V DC
	Audio alarm	Buzzer
	Expansion	1×eSATA interface 2×miniSAS interfaces 2×decoding cards

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Others	Power consumption	≤ 50W (not including HDD) ≤ 165W (including HDD)
	Operating temperature	-10°C to 55°C (14°F to 131°F)
	Operating humidity	10% to 90% (noncondensing)
	Weight	≤ 10.0 Kg
	Dimensions (D×W×H)	Height: 3U, support mounting in standard 19" cabinet 477.1 mm × 481.6 mm × 130.5 mm (18.8''×19''×5.1'') (including front panel)

Appearance

Dimensions
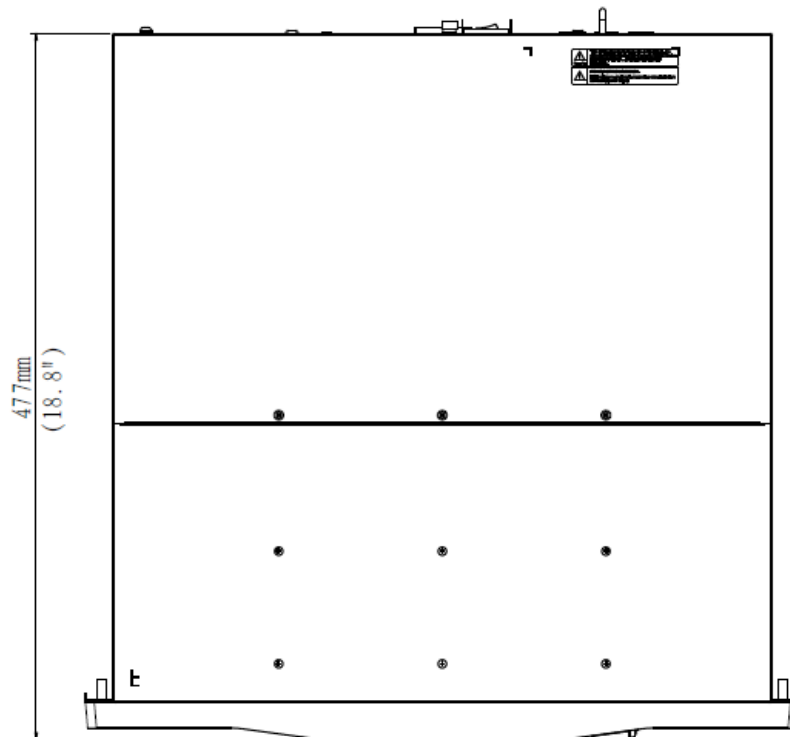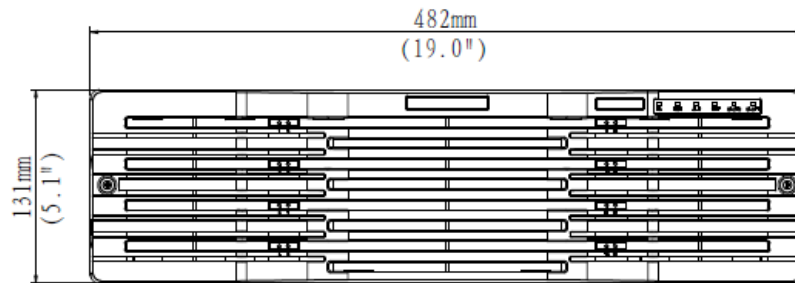
Rear Panel
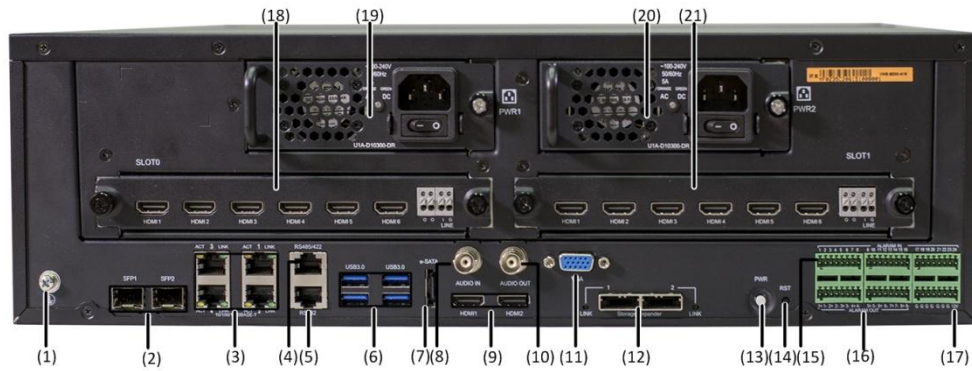
(1) Grounding	(2) 1000M SFP interface	(3) 1000M Ethernet interface
(4) RS-485/422	(5) RS-232	(6) USB3.0
(7) eSATA interface	(8) Audio input	(9) HDMI output
(10) Audio output	(11) VGA output	(12)miniSAS interface
(13) Power button	(14) Reset	(15) Alarm input
(16) Alarm output	(17) 12V power output	(18) Decoding card (optional)
(19) AC power module 1	(20) AC power module 2 (optional)	(21) Decoding card (optional)