Unicorn

Introduction

The Unicorn is a smart integrated surveillance platform with video input, storage, transfer and device management functions designed specifically for digital surveillance applications.The Unicornhas adopted audio/video compression and decompression, embedded system, storage, network, and smart 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

- Compatibility: Standard ONVIF

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

- Connection: 500 device connections, up to 1000 channels of high-definition network videos

- Management: Unified management of NVR, IPC, encoder, decoder, network keyboard and cloud devices; support device configuration import/export

- Storage: Max15 hard disks and two disk enclosures; expandable up to 47 disks with 376TB storage

- Decoding: Max16×1080P decoding outputsin three screens, expandable up to 112×1080P in 15 screens with two decoding cards inserted

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

- VCA alarms: Support of receiving VCA alarms, configuring alarm-linkage operations, and displaying people counting statistics in reports

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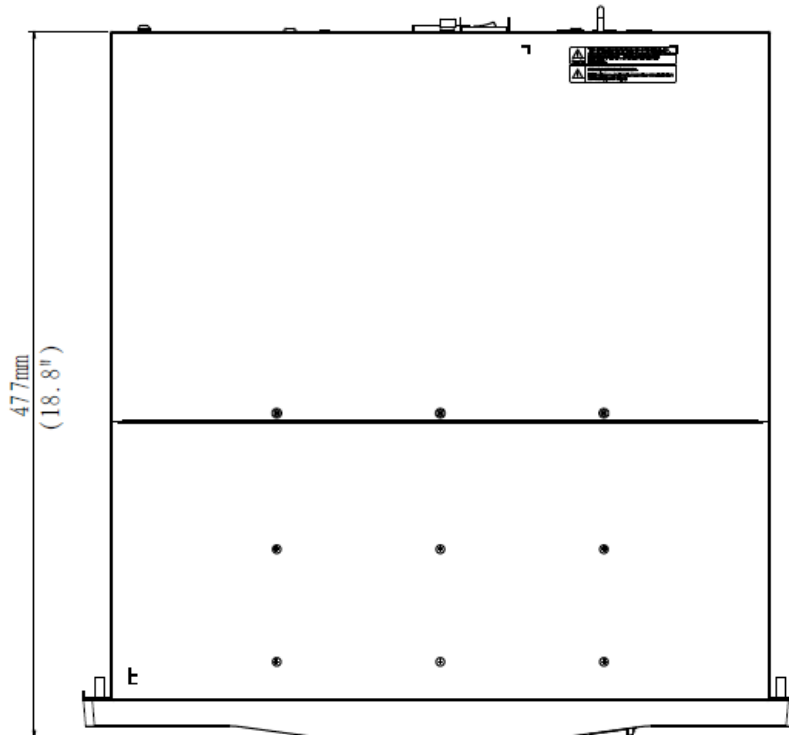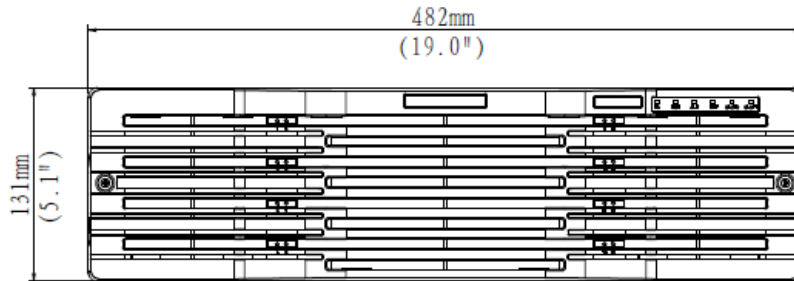
Specifications

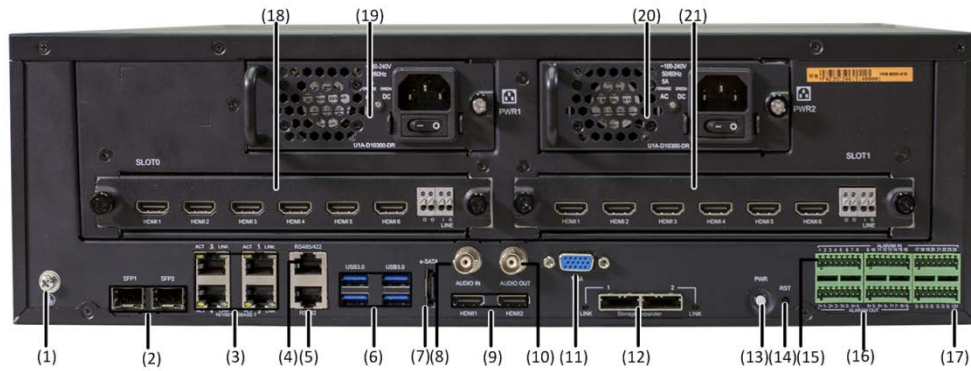| Item		Unicorn
Video management	Number of connected cameras per server	500 devices or 1000 channels
	Device management	IPC, NVR, encoder, decoder(standard/expanded), network keyboard and cloud devices
	Numbers of online users	200
	Numbers of users	1000
	Numbers of roles per user	16
	Bandwidth of video 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.711
	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 15+1HDDs (3.5", up to 8TB for each); the HDD at number 1 slot is planned for system or services, the other 15 for video storage
	RAID mode	RAID1, RAID5
	Bandwidth of video storage per server	512Mbps
	Disk enclosure (optional)	Max 2 disk enclosures supported; models: DEU1008 and DEU1016
	DEU1008 disk enclosure	8xSATA interfaces, up to 8TB storage per interface
	DEU1016 disk enclosure	16xSATA interfaces, up to 8TB storage per interface
Play control		1/3/4/5/6/7/8/9/10/13/16/17/25/32 / 36/64window display Corridor format Up to 3 auxiliary monitors
Playback		Play NVR recordings Up to 24 channels; synchronous playback up to 16 channels

Item		Unicorn
System	Main Processor	Intel(R) Celeron(R) CPU N3160, 64-bit, 4-core processor
	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,reserved for domestic only
	HDMI	2×HDMI
	VGA	1×VGA
	Serial	1×RS-232 (RJ45), 1×RS-485 (RJ45) ,reserved for domestic only
	Alarm input/output	24×alarm inputs, 8×alarm outputs
	Power output	12 V DC
	Audio alarm	Buzzer
	Expansion	1×eSATA interface, reserved for domestic only 2×miniSAS interfaces 2×decoding cards
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

482mm
(19.0")

131mm
(5.1")

477mm
(18.8")

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)