

## Vanguard Guardian+ NVR-2USxx-Al Series

## 16/32/64 Channels Embedded NVR



## **Features:**

- H.265/H.264/MJPEG/MPEG4 codec decoding
- Max 320Mbps incoming bandwidth
- Support 8 SATA ports up to 96TB, Raid 0/1/5/6/10
- Up to 16 Channels perimeter protection
- Up to 4 Channel video stream face recognition
- Up to 24 face picture / sec processing
- Up to 20 face databases with 100,000 face images in total





















## Vanguard Guardian+ NVR- 2USxx-AI Series

Display Split Displa	System		Storage	
Display   Perimeter Protection   Performance   16 Ch, 10 IVS rules each channel   Display split   3840x2160, 1920x1080, 1280x720, 1024x 768etc.   The 1"screen: 16Ch: 1/4/8/16   32Ch: 1/4/8/9162/3/36   54Ch: 1/4/8/916/25/36   54Ch: 1/4/8/916   54Ch	Main Processor	Quad-Core embedded processor	Internal HDD	8 SATA ports, Raid 0/1/5/6/10
Display   Interface   2 HDMI, 1 VGA   3840x2160, 1920x1080, 1280x720, 1024x 768etc.   Performance   16 Ch. 10 NS rules each channel   Performance   16 Ch. 10 NS rules each channel   Object classification   Human/Vehicle   Alsearch   Search by Target Human/Vehicle   Face Recognition   Fac	Operating System	Embedded LINUX	eSATA	1 eSATA
Interface 2 HDM1, 1 VGA  Resolution 3840x2160, 1920x1080, 1280x1024, 1280x210, 1024x 768etc.  The 1" screen: 136Ch: 1/4/8/16 32Ch: 1/4/8/16 32Ch: 1/4/8/16/5/23/6 6ACh" 1/4/8/9/16/23/66  Display split 62 Screen: 1/4/8/9/16  OSD Camera title, Time, Video loss, Camera lock, Motion detection, Recording 12MP/BMP/6MP/5MP/5MP/5MP/5MP/5MP/5MP/5MP/5MP/5MP/5	Display		Davimeter Dretection	
Resolution 1280x72 1024 x 750 care 16 ch: 1/4/8/16 32Ch: 1/4/8/16/25/36 GeCh*1/4/8/16/25/36 The 2** Screen: 1/4/8/16/25/36 The 2** Screen: 1/4/8/9/16/25/36 The 2** Screen: 1/4/8/9/16 Compression	Interface	2 HDMI, 1 VGA		16 Ch 10 IVS rules each channel
The 1º screen is CEIN: 14/8/916  The 1º screen is CEIN: 14/8/916  32Ch: 1/4/9/916/25/96  GACh*1/4/8/9/16/25/96  The 2º Screen It 14/8/916  OSD  Gamera title, Time, Video loss, Camera lock, Motion detection, MD zones: 396(2×18), Video Detection  Motion Detection  M	D 1.11			·
The 1* screen: 16Ch: 1/4/8/16 32Ch: 1/4/8/9/16/25/36-64Ch*1/4/8/9/16/25/36-764Ch*1/4/8/9/16/25/36-764Ch*1/4/8/9/16/25/36-764Ch*1/4/8/9/16/25/36-764Ch*1/4/8/9/16/25/36-764Ch*1/4/8/9/16/25/36-764Ch*1/4/8/9/16/25/36-764Ch*1/4/8/9/16/25/36-764Ch*1/4/8/9/16/25/36-764Ch*1/4/8/9/16/25/36-764Ch*1/4/8/9/16/25/36-764Ch*1/4/8/9/16/25/36-764Ch*1/4/8/9/16/25/36-764Ch*1/4/8/9/16/25/36-764Ch*1/4/8/9/16-76-76-72-76-70-76	Resolution			•
Display split 6ACh"1/4/8/9/16/25/36 The 2" orcen: 1/4/8/9/16 OSD Camera title, Time, Video loss, Camera lock, Motion detection, Recording Recording Compression H.265/H.264/MJPEG/MPEG4 Compression 12MP/8MP/6MP/5MP/3MP/1080P/720P/ 12 + etc Record Rate 16kbps" 20Mbps Bit Rate 16kbps" 20Mbps Bit Rate 16kbps" 20Mbps Bit Rate 16kbps" 20Mbps Wanual, Schedule (Regular (Continuous), MD, Alarm), Stop Welcord Interval 1"12D min (Idefault: 60 min), Pre-record: 1"30 sec, Post-record: 1"6 Ch. Low Level effective Wideo Detection Wolton Detection, MD Zones: 396(22×18), Video Loss & Camera Blank Alarm Input 16 Ch. Low Level effective Alarm Output 6 Ch. Relay Contact (1A@24VDC),NO/NC programmable Playback Diagram and Backup Playback Diagram and Backup Playback Diagram and Backup Mode Play Back Function Play, Rause, Stop, Rewind, Fast play, Slow Play Back Function Play, Rause, Stop, Rewind, Fast play, Slow Play Back Function Play, Next Hie, Previous file, Next camera, Previous camera, Full screen, Repeat, Shuffle, Backup selection, Digital zoon Video UF Camera Input 16/32/64 Protection Start Provence in Power Consumption Working Environment 16/32/64 Performance Channel Video Channel Video Starer and Channel Video Purchanges in total  Al Search  Welcide Condendra, Recording, PIZ, Tour, Alarm, Video Push, Proteous Pizh, Ede Channel Video Push, Proteous Pizh, Proteou		32Ch: 1/4/8/9/16/25/36- 64Ch"1/4/8/9/16/25/36		Search by Target Human/Venicle
Camera title, Time, Video loss, Camera lock, Motion detection, Recording  Recording  Compression H.265/H.264/MIPEG/MPEG4  Resolution 12MP/8MP/6MP/5MP/3MP/1080P/ 720P/ D1 / etc 12MP/8MP/6MP/6MP/5MP/3MP/1080P/ 720P/ D1 / etc 12MP/8MP/6MP/5MP/3MP/1080P/ 720P/ D1 / etc 12MP/8MP/6MP/6MP/5MP/3MP/1080P/ 720P/ D1 / etc 12MP/8MP/6MP/6MP/5MP/9MP/6MP/5MP/9MP/6MP/5MP/9MP/6MP/5MP/9MP/6MP/9MP/9MP/9MP/9MP/9MP/9MP/9MP/9MP/9MP/9	Display split			
Database Management   Up to 20 faces database with 100,000 face images in total	OSD		renomiance	Channel picture stream face Recognition (FD camera)
Compression H.265/H.264/MJPEG/MPEG4 Resolution 12MP/8MP/6MP/SMP/3MP/1080P/ 720P/ D1 / etc  Record Rate 320 Mbps Bit Rate 16kbps** 20Mbps Recording Mode Manual, Schedule (Regular (Continuous), MD, Alarm), Stop Playback 11*20 min (default: 60 min), Pre-record: 1r-30 sec, Post-record: 10*-300 sec  Video Detection and Alarm  Trigger Events Recording, PTZ, Tour, Alarm, Video Push, Email, FTP, Buzzer & Screen tips Video Detection with the programmable  Non-motor Vehicle Type, color, people number  Alarm Input 16 Ch. Low Level effective Alarm Output 6 Ch. Relay Contact (14@24VDC), NO/NC programmable  Playback and Backup  Playback 1/4/9/16  Search Mode USB Device/Network/Internal SATA burner  Play Pause, Stop, Rewind, Fast play, Slow play, Next file, Previous Camera, Full Screen, Schuffle, Backup selection, Digital zoom  Video  IP Camera Input 16/32/64  Database Management Trigges in total  Buzzer, Voice prompt, Email, Snapshots, Recording, Alarm out, PTZ, Activation  Recording, Alarm out, PTZ, Activation  Recording, Alarm out, PTZ, Activation  Metadata  Face Gender, age, glasses, bread, mask  Vehicle olor, Vehicle model, Vehicle logo, plate, color, bottom, style, bottom color, hat, bag  Non-motor Vehicle Type, color, people number  Al Search Support search target video by metadata  Network  Ethernet RJ-45 (10/100 /1000 Base-T)  IPV4/IPV6, HTTP, HTTPS, SSL, TCP/IP, UDF  Video Detection Video Detection, MD Zones: 396(22×18), Video Video  IP Camera Input 16 Ch. Low Level effective  Oat Sand width Management, Tex Integration, Bonjour, ANR  Compatibility ONVIF, PSIA, CGI  Max. User Access 128 Users  Smart Phone IPhone, IPad, Android, Windows Phone  Auxiliary Interface  USB Interface 4 ports (2 Rear USB3.0,2 Front USB2.0)  RS322 1 port, For PC communication & Keyboard  RS485 1 port, For PC communication & Keyboard  Power Supply AC 100°-240V, 50/60 Hz  Power Consumption Max. 40W without HDD  Power Supply AC 10°-55° C/ 10%-90%RH / 86°-106kpa  Dimension (WxDH)  Voleo	Recording		AI Search	Up to 8 Target face images at same time
Resolution 12MP/8MP/6MP/5MP/3MP/1080P/720P/ D1 /etc  Record Rate 320 Mbps Bit Rate 16kbps* 20Mbps Recording Mode Manual, Schedule (Regular (Continuous), MD, Alarm), Stop  Wetadata  Face Gender, age, glasses, bread, mask Vehicle color, Vehicle model, Vehicle logo, place, color, better than the properties of the pro	<u>-</u>	H.265/H.264/MJPEG/MPEG4	Database Management	•
Record Rate 320 Mbps Bit Rate 16kbps* 20Mbps Recording Mode Manual, Schedule (Regular (Continuous), MD, Alarm), Stop  Record Interval 1**120 min (default: 60 min), Pre-record: 1**30 sec, Post-record: 1**30 sec, Post-record	Resolution	12MP/8MP/6MP/5MP/3MP/1080P/		Buzzer, Voice prompt, Email, Snapshots,
Recording Mode Record Interval  1°120 min (default: 60 min), Pre-record: 1°30 sec, Post-record: 1°30 sec, Post-rec	Record Rate	320 Mbps		Recording, Alarm Out, 1-12, Activation
Recording Mode  Manual, Schedule (Regular (Continuous), MD, Alarm), Stop  Part 120 min (default: 60 min), Pre-record: 1°30 sec, Post-record: 10°300 sec  Video Detection and Alarm  Trigger Events  Recording, PTZ, Tour, Alarm, Video Push, Email, FTP, Buzzer & Screen tips  Video Detection  Motion Detection, MD Zones: 396(22×18), Video Loss & Camera Blank  Alarm Input  16 Ch. Low Level effective Alarm Output  6 Ch. Relay Contact (1A@24VDC),NO/NC programmable  Playback and Backup  Playback  1/4/9/16  Search Mode  Time/Date, Alarm, MD & Exact search (accurate to second), Smart search burner  Play Back Function  Play, Pause, Stop, Rewind, Fast play, Slow play, Next file, Previous file, Next camera, Previous camera, Full screen, Repeat, Shuffle, Backup selection, Digital zoom  Vehicle  Non-motor Vehicle Non-motor Vehicle Non-motor Vehicle Non-motor Vehicle Non-motor Vehicle Non-motor Vehicle Non-motor Vehicle Non-motor Vehicle Type, color, people number  Al Search Support search target video by metadata  Network  Ethernet RI-45 (10/100 /1000 Base-T) Protocol NTP, DHCP, DNS, PPPOE, DNS, FTP, IP Filter QoS, Band width Management, Tex Integration, Bonjour, ANR Non-motor Vehicle Type, color, peotrom, act, bag bag bag bag by Non-motor Vehicle Non-motor Vehicle Non-motor Vehicle Type, color, peotrom, act, bag	Bit Rate	16kbps~ 20Mbps	Metadata	
Record Interval Returne Record Interval Record Interval Returne Record Interval Returne Record Interval Record Interval Returne Record Interval Research Support search target video by metadata Returne Returne Record Interval Returne Retur		Manual, Schedule (Regular (Continuous).	Face	
Non-motor Vehicle Type, color, people number  Al Search Support search target video by metadata  Non-motor Vehicle Type, color, people number  Al Search Support search target video by metadata  Non-motor Vehicle Type, color, people number  Al Search Support search target video by metadata  Network  Ethernet RJ-45 (10/100 /1000 Base-T)  Network  Ethernet RJ-45 (10/100 /1000 Base-T)  Network  Ethernet RJ-45 (10/100 /1000 Base-T)  Play/IPV6, HTTP, HTTPS, SSL, TCP/IP, UDF UpnP, ICMP, IGMP, SNMP, RTSP, RTP, SMTF QoS, Band width Management, Tex Integration, Bonjour, ANR  Compatibility  Max. User Access 128 Users  Smart Phone iPhone, iPad, Android, Windows Phone  Auxiliary Interface  USB Interf	Recording Mode	MD, Alarm), Stop	Vehicle	plate, color, bottom, style, bottom color,
Trigger Events  Recording, PTZ, Tour, Alarm, Video Push, Email, FTP, Buzzer & Screen tips  Video Detection  Motion Detection, MD Zones: 396(22×18), Video Loss & Camera Blank  Alarm Input  16 Ch. Low Level effective Alarm Output  6 Ch. Relay Contact (1A@24VDC), NO/NC programmable  Playback and Backup  Playback and Backup  Playback  1/4/9/16  Search Mode  Time/Date, Alarm, MD & Exact search (accurate to second), Smart search  Backup Mode  USB Device/Network/Internal SATA burner  Play, Pause, Stop, Rewind, Fast play, Slow play, Next file, Previous file, Next camera, Previous camera, Full screen, Repeat, Shuffle, Backup selection, Digital zoom  Ply Camera Input  Recording, PTZ, Tour, Alarm, Video Push, Email, FTP, Buzzer & Streen tips  Ethernet  RJ-45 (10/100 /1000 Base-T)  Rethernet  RJ-45 (10/100 /100 Base-T)  RP4/IPV6, HTTP, HTTPS, SX, TCP/IP, UDE  ROW-I IMPA/IPV6, HTP, HTTPS, SX, TCP/IP, UDE  ROW-I IMPA/IPV6, HTP, HTPS, SLT, Embile States  RT-45 (10/100 /100 Base-T)  ROW-I IMPA/IPV6, HTP, HTPS, SLT, Embile States  RT-45 (10/100 /100 Base-T)  Row-I IMPA/IPV6, HTP, HTPS, St. Tell	Record Interval		Non-motor Vehicle	· · ·
Email, FTP, Buzzer & Screen tips  Email, FTP, Buzzer & Screen tips  Motion Detection, MD Zones: 396(22×18), Video Loss & Camera Blank  Alarm Input  16 Ch. Low Level effective  Alarm Output  6 Ch. Relay Contact (1A@24VDC),NO/NC programmable  Playback and Backup  Playback  1/4/9/16  Search Mode  Time/Date, Alarm, MD & Exact search (accurate to second), Smart search  Lys B Device/Network/Internal SATA burner  Play Back Function  Play, Pause, Stop, Rewind, Fast play, Slow play, Next file, Previous file, Next camera, Previous camera, Full screen, Repeat, Shuffle, Backup selection, Digital zoom  Play Camera Input  Ethernet  RJ-45 (10/100 /1000 Base-T)  IPV4/IPV6, HTTP, HTTPS, SSL, TCP/IP, UDF  UpnP, ICMP, IGMP, SNMP, RTSP, RTP, SMTF  NTP, DHCP, DNS, PPPOE, DDNS, FTP, IP Filter QoS, Band width Management, Tex Integration, Bonjour, ANR  Compatibility  ONVIF, PSIA, CGI  Max. User Access  128 Users  Smart Phone  iPhone, iPad, Android, Windows Phone  Auxiliary Interface  USB Interface	Video Detection and Alarm		Al Search	Support search target video by metadata
Motion Detection, MD Zones: 396(22×18), Video Loss & Camera Blank  Alarm Input  16 Ch. Low Level effective  Alarm Output  6 Ch. Relay Contact (1A@24VDC),NO/NC programmable  Playback and Backup  Playback  1/4/9/16  Search Mode  Time/Date, Alarm, MD & Exact search (accurate to second), Smart search  Alarm Backup Mode  Backup Mode  USB Device/Network/Internal SATA burner  Play, Pause, Stop, Rewind, Fast play, Slow play, Next file, Previous Gamera, Full screen, Repeat, Shuffle, Backup selection, Digital zoom  Play Camera Input  16/32/64  Ethernet  RJ-45 (10/100 /1000 Base-T)  Ethernet  RJ-45 (10/100 /1000 Base-T)  IPv4/IPv6, HTTP, HTTPS, SSL, TCP/IP, UDF, UDF, UDF, UDF, PUDF, DINS, PTPO, ENDRS, FTP, IP Filter QoS, Band width Management, Tex Integration, Bonjour, ANR  Compatibility  ONVIF, PSIA, CGI  Max. User Access  128 Users  Smart Phone  iPhone, iPad, Android, Windows Phone  Auxiliary Interface  USB Interface	Trigger Events		Network	
Video Loss & Camera Blank  Alarm Input  16 Ch. Low Level effective  Alarm Output  6 Ch. Relay Contact (1A@24VDC),NO/NC programmable  Playback and Backup  Playback and Backup  Playback  Time/Date, Alarm, MD & Exact search (accurate to second), Smart search  Backup Mode  Play, Pause, Stop, Rewind, Fast play, Slow play, Next file, Previous camera, Full screen, Repeat, Shuffle, Backup selection, Digital zoom  Plotocol  Video  Vid			Ethernet	RJ-45 (10/100 /1000 Base-T)
Alarm Output 6 Ch. Relay Contact (1A@24VDC),NO/NC programmable  Playback and Backup Playback Search Mode Backup Mode  USB Device/Network/Internal SATA burner Play, Pause, Stop, Rewind, Fast play, Slow play, Next file, Previous file, Next camera, Previous camera, Full screen, Repeat, Shuffle, Backup selection, Digital zoom  Video  IP Camera Input  16/32/64  Compatibility ONVIF, PSIA, CGI Max. User Access 128 Users Smart Phone iPhone, iPad, Android, Windows Phone  Auxiliary Interface USB I	Video Detection			IPv4/IPv6, HTTP, HTTPS, SSL, TCP/IP, UDP, UpnP, ICMP, IGMP, SNMP, RTSP, RTP, SMTP,
Alarm Output  6 Ch. Relay Contact (1A@24VDC),NO/NC programmable  Compatibility  ONVIF, PSIA, CGI  Max. User Access  128 Users  128 Users  128 Users  Max. User Access  128 User  Max. User Acces  128 User  Max. User Acces  128 User  Max. User Acces  Max. User Acces  128 User  Max. User Acces  128 User  Max. User Acces  Max. User Acces  Max. User Acces  Max	Alarm Input	16 Ch. Low Level effective	· -	NTP, DHCP, DNS, PPPOE, DDNS, FTP, IP Filter, QoS, Band width Management, Text Integration, Bonjour, ANR
Playback and Backup Playback Playback 1/4/9/16 Smart Phone iPhone, iPad, Android, Windows Phone Search Mode Time/Date, Alarm, MD & Exact search (accurate to second), Smart search Backup Mode USB Device/Network/Internal SATA burner Play, Pause, Stop, Rewind, Fast play, Slow play, Next file, Previous file, Next camera, Previous camera, Full screen, Repeat, Shuffle, Backup selection, Digital zoom Play Camera Input 16/32/64  Max. User Access 128 Users  Max. User Access 128 Users  128	Alarm Output	, , = ,, ,		
Playback 1/4/9/16 Smart Phone iPhone, iPad, Android, Windows Phone  Time/Date, Alarm, MD & Exact search (accurate to second), Smart search  Backup Mode USB Device/Network/Internal SATA burner  Play, Pause, Stop, Rewind, Fast play, Slow play, Next file, Previous file, Next camera, Previous camera, Full screen, Repeat, Shuffle, Backup selection, Digital zoom  Video	Playback and Backup	. 9		
Search Mode  Time/Date, Alarm, MD & Exact search (accurate to second), Smart search  Backup Mode  USB Device/Network/Internal SATA burner  Play, Pause, Stop, Rewind, Fast play, Slow play, Next file, Previous file, Next camera, Previous camera, Full screen, Repeat, Shuffle, Backup selection, Digital zoom  Video  IP Camera Input  Time/Date, Alarm, MD & Exact search (accurate to second), Smart search  USB Interface  USB Interface  4 ports (2 Rear USB3.0,2 Front USB2.0)  RS232  1 port, For PC communication & Keyboard  RS485  1 port, For PTZ control  eSATA  1 eSATA Port  General  Power Supply  AC 100~240V, 50/60 Hz  Power Consumption  Max. 40W without HDD  Working Environment  Dimension (W×D×H)  2U, 440mm×450mm×95mm		1/1/0/14/5		
Search Mode  (accurate to second), Smart search  Backup Mode  USB Device/Network/Internal SATA burner  Play, Pause, Stop, Rewind, Fast play, Slow play, Next file, Previous file, Next camera, Previous camera, Full screen, Repeat, Shuffle, Backup selection, Digital zoom  Video  IP Camera Input  16/32/64  USB Interface 4 ports (2 Rear USB3.0,2 Front USB2.0)  RS232 1 port, For PC communication & Keyboard RS485 1 port, For PTZ control  eSATA 1 eSATA Port  General  Power Supply AC 100~240V, 50/60 Hz  Working Environment -10°C~+55°C / 10%~90%RH / 86~106kpa  Dimension (W×D×H)  2U, 440mm×450mm×95mm	ridyDack	1/4/9/16		iPhone, iPad, Android, Windows Phone
Caccurate to second), Smart search   USB Interface   4 ports (2 Rear USB3.0,2 Front USB2.0)	Search Mode	(accurate to second), Smart search	Auxiliary Interface	
Backup Mode    burner			USB Interface	4 ports (2 Rear USB3.0,2 Front USB2.0)
Play, Pause, Stop, Rewind, Fast play, Slow play, Next file, Previous file, Next camera, Previous camera, Full screen, Repeat, Shuffle, Backup selection, Digital zoom  Video  IP Camera Input  Play, Pause, Stop, Rewind, Fast play, Slow play, Next file, Previous file, Next camera, Previous camera, Full screen, Repeat, Shuffle, Backup selection, Digital zoom  Power Supply  AC 100~240V, 50/60 Hz  Power Consumption  Max. 40W without HDD  Working Environment  -10°C~+55°C / 10%~90%RH / 86~106kpa  Dimension (W×D×H)  2U, 440mm×450mm×95mm	Backup Mode		RS232	1 port, For PC communication & Keyboard
Play Back Function  play, Next file, Previous file, Next camera, Previous camera, Full screen, Repeat, Shuffle, Backup selection, Digital zoom  Video  IP Camera Input  16/32/64  Power Supply  Power Consumption  Working Environment  -10°C~+55°C / 10%~90%RH / 86~106kpa  Dimension (W×D×H)  2U, 440mm×450mm×95mm	Play Back Function	Play, Pause, Stop, Rewind, Fast play, Slow play, Next file, Previous file, Next camera, Previous camera, Full screen, Repeat,	-	<u> </u>
Previous camera, Full screen, Repeat, Shuffle, Backup selection, Digital zoom  Video  Previous camera, Full screen, Repeat, Shuffle, Backup selection, Digital zoom  Power Supply  Power Consumption  Max. 40W without HDD  Working Environment  -10°C~+55°C / 10%~90%RH / 86~106kpa  Dimension (W×D×H)  2U, 440mm×450mm×95mm			eSATA	1 eSATA Port
Power Consumption Max. 40W without HDD  IP Camera Input 16/32/64 Working Environment -10°C~+55°C / 10%~90%RH / 86~106kpa  Dimension (W×D×H) 2U, 440mm×450mm×95mm			General	
Working Environment		Shuffle, Backup selection, Digital zoom	Power Supply	AC 100~240V, 50/60 Hz
Dimension 2U, 440mm×450mm×95mm (W×D×H)	Video		Power Consumption	Max. 40W without HDD
(W×D×H) 20, 440mm×450mm×95mm	IP Camera Input	16/32/64	Working Environment	-10°C~+55°C / 10%~90%RH / 86~106kpa
Weight 9.0KG (without HDD)				2U, 440mm×450mm×95mm
			Weight	9.0KG (without HDD)