

## TVN22

TruVision™ NVR 22, 8/16/32 channel H.265 NVR, 1.5U

#### Overview

TruVision NVR 22 (TVN 22) is a robust high performance H.264/H.265 network video recorder. With a total bandwidth of 80/160/256 Mbps available, the TVN 22 is able to connect up to 8/16/32 IP cameras and provide real time recording (25/30 fps) at Full HD 1080p resolution on all channels simultaneously. With its fully flexible bandwidth allocation, the TVN 22 allows recording resolutions up to 8MPX at various frame rates.

#### Ease of use

TVN 22 is designed to make system configuration and overall use easier for both the installer and end-users through features such as: ezDDNS, start-up wizards, plug & play hard drives, auto discovery of natively supported cameras and is fully compatible with TruVision Navigator 6.0SP1 and TVRmobile 2.4.

#### H.265

TVN 22 is supporting both H.264 and H.265 compression techniques. The H.265 compression is the next evolution of video encoding. The use of H.265 will result in a reduced file size for the same video content and a reduced transmission bandwidth compared to H.264. This means that less storage capacity is needed by H.265 than H.264 encoding for the same video duration. To use the H.265 encoding in the TVN 22, H.265 cameras need to be used. H.265 will be available in the TruVision S4 IP cameras.

#### Recording performance

The maximum on-board storage capacity for the TVN 22 is 24TB, using four six TB hard drives. The hard drives can be accessed via the lockable front panel door, allowing customers to easily expand storage as their system and/or requirements grow. Recording options include continuous, event and alarm. The three modes can be combined, to ensure that the most efficient recording is possible.

#### Basic intrusion integration

TVN 22 has an alarmreceiver module embedded inside. The alarm message receiver can connect to up to three Interlogix IP intrusion panels that report in SIA or XSIA format. Alarm messages, disarming and arming messages can be send from the alarm panel to the recorder, which then can take actions (trigger alarm recording, send a PTZ to a preset, run a shadow tour or preset tour, trigger an alarm output or send a notification message to TVRmobile). Also the heartbeat message between panel and recorder is monitored. This solution offers



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#### **Standard Features**

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- · Linux embedded Plug and Play configuration
- Up to 80/160/256 Mbps camera recording bandwidth
- Up to 8/16/32 channels to be connected
- Up to 24TB embedded storage (4x 6TB)

ezDDN9

- Flip-open front panel for easy HDD access, servicing and expansion
- · New icon based front panel
- · Real time Full HD recording
- Motion detection, VCA, privacy masking, tamper detection
- TruVision IP camera auto-detection
- · Third party camera support via ONVIF and PSIA
- · IP camera configuration import/export
- Custom protocol configuration (RTSP streaming)
- · Network redundancy
- Integration of UTC IP intrusion panels via SIA/XSIA reporting
- Recorder failover functionality (one failover unit per 4 operational recorders)
- TVK-800 IP Keypad support (no support for local display of H.265 cameras)
- USB DVD burner support
- Full browser-, OSD- and software-based access for live, recorded & configuration
- TVRmobile app for iOS and Android
- TruVision Navigator license-free client/host or standalone application
- External integration through SDK

# TVN22

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straightforward alarm verification and is free of charge.

## **Specifications**

| Video/Audio input   |  |
|---|--|
| IP camera input:  | Up to 8/16/32 channels   |
| Total bandwidth available:  | IN:80/160/256 Mbps/OUT:256 Mbps for all models   |
| Maximum bandwidth per channel:  | 16 Mbps  |
| Average bandwidth per channel:  | 10 Mbps  |
| Video compression standards supported:  | H.264, H.265, MPEG-4   |
| Bi-directional audio:   | 1-ch, RCA ( 2.0 Vp-p, 1 kohm )   |
| RTSP streaming support:   | Yes  |
| Onvif support:  | Yes  |
| Viewing   |  |
| OSD viewing resolutions:  | 8MPX/6MPX/5MPX/4MPX/3MPX/1080p/<br>UXGA/720p/VGA/4CIF/DCIF/2CIF/CIF/QCIF   |
| Remote viewing resolutions:   | Up to 8 MPX - depending on remote client capabilities  |
| HDMI output resolutions:  | 3840 x 2160/60Hz, 3840 x 2160/30Hz, 1920 x<br>1080/60Hz, 1600 x 1200/60Hz, 1280 x<br>1024/60Hz, 1280 x 720/60Hz, 1024 x 768/60Hz |
| HDMI version:   | HDMI 2.0 (compatible with 1.4)   |
| VGA output resolutions:   | 1920 x 1080P/60 Hz, 1280 x 1024/60 Hz, 1280 x 720/60 Hz, 1024 x 768/60 Hz  |
| BNC output:   | Yes - alarm event only, no menu controls   |
| Digital Zoom:   | Up to 16x  |
| Playback  |  |
| Playback resolution:  | Up to 8 MPX  |
| Simultaneous playback OSD:  | Up to 8/16 channels  |
| Simultaneous playback browser:  | Max. 16 tiles (4x4)  |
| Reverse playback OSD:   | Up to 1 ch.  |
| Reverse playback browser:   | Up to 9 channels, depending on PC performance  |
| Playback transcoding  | Yes, using web browser   |
| Recording   |  |
| Recording resolution:   | 8MPX/6MPX/5MPX/4MPX/3MPX/Full HD 1080p/<br>UXGA/HD 720p/VGA/4CIF/DCIF/2CIF /CIF/QCIF   |
| Internal SATA slots:  | 4  |
| Maxmlum capacity per SATA drive:  | 6TB  |
| Recording modes:  | Time lapse High, Time lapse Low, Event, Alarm, Manual  |
| External Sstorage   | eSATA, NAS, SAN  |
| Networking  |  |
|   |  |
| Network interface:  | 2 RJ-45 10/100/1000 Mbps self-adaptive<br>Ethernet interface   |
| Network redundancy:   | Ethernet interface Yes   |
| Network redundancy: NIC redundancy:   | Yes Yes  |
| Network redundancy: NIC redundancy: Multi-address mode  | Yes Yes Yes  |
| Network redundancy: NIC redundancy: Multi-address mode ezDDNS:  | Yes Yes Yes Yes Yes  |
| Network redundancy: NIC redundancy: Multi-address mode ezDDNS: DDNS:  | Yes Yes Yes Yes Yes Yes Yes  |
| Network redundancy: NIC redundancy: Multi-address mode ezDDNS: DDNS: no-IP.com:   | Yes Yes Yes Yes Yes  |
| Network redundancy: NIC redundancy: Multi-address mode ezDDNS: DDNS: no-IP.com: Total viewing bandwidth available:  | Yes Yes Yes Yes Yes Yes Yes  |
| Network redundancy: NIC redundancy: Multi-address mode ezDDNS: DDNS: no-IP.com: Total viewing bandwidth available: Total Live viewing streams available:  | Ethernet interface Yes Yes Yes Yes Yes Yes Yes Yes   |
| Network redundancy: NIC redundancy: Multi-address mode ezDDNS: DDNS: no-IP.com: Total viewing bandwidth available: Total Live viewing streams available: Total playback viewing streams available:  | Ethernet interface Yes Yes Yes Yes Yes Yes Yes 256 Mbps 128  |
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| Power supply:                          | AC 100V~240V  |
|--|---|
| Power consumption (without hard disk): | <=20W   |
| Operating temperature:                 | -10 °C ~ +55 °C (14 °F ~ 131 °F)                    |
| Operating humidity:                    | 10% ~ 90%   |
| Chassis:                               | 1.5U rack mountable or desk-based chassis           |
| Dimensions (W x D x H):                | 442 × 398 × 74 mm (17.4 × 15.67 × 2.91 ")           |
| Weight (without hard disk):            | less than 5 kg                                      |
| Operations                             |   |
| Local:                                 | On screen display - VGA, HDMI or BNC (spot)         |
| Remote:                                | Browser interface/TruVision Navigator/<br>TVRmobile |
| Browser requirements:                  | IE 8 9 10 11, Firefox                               |

## **Ordering Information**

| Part No.     | Description |
|--------------|-------------|
| TVN-2208-xxT |             |
| TVN-2216-xxT |             |
| TVN-2232-xxT |             |



