

# TVN22S

TruVision™ NVR 22S, 8/16 channel Plug&Play H.265 NVR, 1.5U

## Overview

TruVision NVR 22S (TVN 22S) is a robust high performance H.264/H.265 network video recorder with 8 or 16 embedded plug & play PoE ports. With a total bandwidth of 80/160 Mbps available, the TVN 22S is able to connect up to 8/16 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 22S allows recording resolutions up to 8MPX at various frame rates.

## Plug-&-play functionality

Setting up TVN 22S is easy. Its embedded PoE ports allow you to connect TruVision IP cameras as they were analog cameras. When plugged in, cameras are automatically assigned IP addresses, added to the recorder and set up at default configuration. Each IP camera can also be set up individually to ensure full flexibility. The fully flexible PoE allocation feature ensures an optimally efficient use of the PoE power available.

## Ease of use

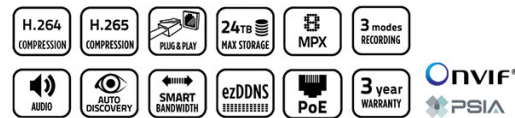
TVN 22S allows users full flexibility in the way they want to configure, manage and monitor their video surveillance solution. In addition to management of the unit through its browser interface or TruVision Navigator, the TVN 22S allows users to also operate the recorder locally using its front panel controls, local VGA or HDMI outputs and its intuitive on screen display.

## H.265

The TVN 22S is supporting both H.264 and H.265 compression techniques. The H.265 compression is the next evolution of video encoding. Using 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 for the same storage capacity more video can be stored when using H.265 than H.264 encoding. To use the H.265 encoding in the TVN 22S, 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 22S 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.



## Standard Features

- Linux embedded Plug and Play configuration
- Up to 80/160 Mbps camera recording bandwidth
- Up to 8/16 channels to be connected
- Up to 8/16 embedded PoE camera ports
- PoE-af & PoE-at support
- Up to 24TB embedded storage (4 x 6TB)
- Flip-open front panel for easy HDD access, servicing & expansion
- New icon based front panel
- Real-time Full HD recording
- Motion detection, VCA, privacy masking, tamper detection
- TruVision IP camera auto-discovery
- Third party camera support via ONVIF & PSIA
- IP camera configuration import/export
- Custom protocol configuration (RTSP streaming)
- 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 display of H.265 cameras possible on LCD display)
- USB DVD burner support
- TruVision Navigator license-free client/host or standalone application (6.0SP1)
- TVRmobile app for Android and iOS

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## 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 straightforward alarm verification and is free of charge.

## Specifications

### Video/Audio input

IP camera input:	Up to 8/16 channels
Total bandwidth available:	IN: 80/160 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/Full HD1080p/UXGA/HD 720p/VGA/4CIF/DCIF 2CIF / CIF / QCIF
Remote viewing resolutions	Up to 8 MPX - depending on remote client capabilities
HDMI output resolutions:	3840 × 2160/60Hz, 3840 × 2160/30Hz, 1920 × 1080/60Hz, 1600 × 1200/60Hz, 1280 × 1024/60Hz, 1280 × 720/60Hz, 1024 × 768/60Hz
VGA output resolutions	1920 × 1080P/60 Hz, 1280 × 1024/60 Hz, 1280 × 720/60 Hz, 1024 × 768/60 Hz
HDMI version:	HDMI 2.0 (compatible with 1.4)
BNC output	Yes - alarm event only, no menu controls
Digital zoom	Up to 16x

### Playback

Playback resolution:	Up to 8 MPX
Synchronous playback OSD	Up to 8/16 channels
Simultaneous playback browser:	Max 16 tiles (4x4)
Reverse playback OSD:	Up to 1ch
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 HD1080p/UXGA/HD 720p/VGA/4CIF/DCIF/2CIF/CIF/QCIF
Internal SATA slots:	4
Maximum capacity per SATA drive	6TB
Recording modes:	Time lapse High, Time lapse Low, Event, Alarm, Manual
External storage:	eSATA, NAS, SAN

### Networking

Network interface:	1 RJ-45 10/100/1000 Mbps self-adaptive Ethernet interface
ezDDNS:	Yes
DDNS:	Yes
no-IP.com:	Yes
Total viewing bandwidth available	256 Mbps
Total Live viewing streams available	128

Total playback viewing streams available	128
HTTPS support:	Yes
<b>External interface</b>	
IP camera interface	8/16 PoE IP camera ports
PoE support	PoE-af/PoE-at
PoE budget	200W
Plug-&-Play functionality	Yes, TruVision cameras
RS-232 interface:	Yes
RS-485 interface	Yes (not used)
USB interface:	2 x USB 2.0 (front), 1 x USB 3.0 (back)
Alarm interface:	16 alarm in (NO/NC), 4 alarm out (NO)

### General

Power supply:	AC 100V~240V
Power consumption (without hard disk)	20 W (without enabling PoE)
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 x 371 x 74 mm (17.4 x 14.61 x 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/TVRmobile
Browser requirements:	IE 8 9 10 11, Firefox

## Ordering Information

Part No.	Description
TVN-2208S-xxT	
TVN-2216S-xxT	

