



## Product Data Sheet

# UltraView Encoder 10

Ultra-compact single channel encoder/decoder

### Overview

The UltraView Encoder/Decoder 10 is a multi-function video encoder/decoder that uses the latest and most advanced video compression available on the market. H.264-SVC provides improved video quality, flexibility and scalability (see 'H.264-SVC compression'). The unit allows digital video capture or display, streaming, external storage and embedded analytics in a single ultra-compact unit operating on an IP-based network. This encoder/decoder is part of the UltraView EVP (Enterprise Video Platform), which is a cohesive family of precision engineered equipment designed to help protect people, property and critical infrastructure.

The unit either supports 1 analog video encoding (Encoder 10) or 1 analog video decoding (Decoder 10). It includes an integrated PTZ control port, 1 alarm input and 1 output. The USB port is already included for future extensions and for maximum flexibility. Also standard are video content analysis algorithms including Activity Detection and various camera health monitoring services (camera blur, covered camera, displacement). All of these features combined in an ultra-compact form factor establish the UltraView Encoder 10 as one of the most exciting newcomers in its class.



### Standard Features

- H.264-SVC (Scalable Video Coding) includes
  - True multi-streaming
  - Latest, most advanced compression standard
  - More capabilities than typical H.264 implementations via image/frame rate scalability
  - Reduced bandwidth (15-30%) and better image quality compared to MPEG4-ASP
  - Same quality from PTZ as from stationary cameras
- A scalable network surveillance solution
  - Part of the UltraView Video Platform
  - Hardware encoding (Encoder 10) or decoding (Decoder 10) unit
  - Supports 25/30 FPS (4CIF) and video content analysis
- Simple to configure and install
  - Remote system-wide configuration with easy-to-use software
  - Ultra-compact form factor
  - Mounting brackets for rack-mount or wall/ceiling fixing
- Flexible video redirection
  - Video streams can be sent to any recording EVP device that supports H.264-SVC
  - Video streams (live or recorded) from any EVP H.264-SVC device can be viewed on analog monitors
  - Video streams viewable from VSC (standard GUI) and from any viewer developed from the SDK
- Leverage the power of the EVP VOS
  - Common Video Operating System (VOS) allows all UltraView EVP devices to work together
  - Distributed intelligence for more flexibility and robustness
  - Supports live, playback and recording streams
  - Supports video protection, video redirection (device to device) and authentication

# UltraView Encoder 10

Ultra-compact single channel encoder/decoder

## Specifications

Physical	Single channel encoder/decoder with ultra-compact form factor
Dimensions	72 (W) x 19 (H) x 95 (D) mm Weight: 300 g
Power supply	12V DC - 5W external power supply module
Power consumption	5 W (full load at 25°C)
Cooling device	Fanless cooling design
Temperature	Operating: 0°C to 50°C, max. 90% RH Storage: -40°C to 80°C
Conformity	CFR 47 part 15 Subpart B (FCC), European Community CE (Declaration of Conformity): EN55022B, EN55024, EN50130-4, EN60950-1, UL Std 60950-1
MTBF	1'300'000 hrs
Interface module	Phoenix Terminal Connector
Serial	1 serial port (1x RS485 master input or output pass through)
I/O	1 x Input (TTL, compliant with 48V input voltage) 1 x Output (open collector, compliant with 48V external power)
USB	1 x USB 2.0 (For future extensions)
System	
Processor	TI DM6446
System memory	128 MB DDR2
Networking	Embedded auto-sensing single Ethernet 10/100 ethernet LAN IP multicast, unicast and multi-unicast support Ethernet/IP CoS support (802.1p/Q)
System monitoring	Remote alarm notification through SNMP/ HTTP, e-mail or pager Alarm module: audible and visual notification for system status Embedded monitoring: temperature, watchdog timer, voltage Running on the EVP Video Operating System (VOS). Encoder 10 requires VOS 4.1.1 or higher; Decoder 10 requires VOS 4.2 or higher
Video	Latest H.264-SVC compression Encoder 10: encoding only Decoder 10: decoding only Low bandwidth and low latency PAL (720x576 @ 25 FPS); NTSC (720x486 @ 30 FPS) 1 BNC composite video @75 Ohm

The UltraView Encoder 10 is a robust video acquisition and hardware display equipment predestined to serve in solutions such as highways or urban surveillance. Encoded video from the Encoder 10 can be stored on units with internal storage (UVR 40 and UVR 60) or may be stored on video storage servers using the UltraView NVR 80. Live streams from the Encoder 10 are viewable directly from a VSC client workstation or via an SDK developed user application. The Decoder 10 (UVX-101) provides decoding to analog monitors of any live or recorded H.264-SVC video stream that originated from any UltraView H.264-SVC device (Encoder 10, Recorder 40, Recorder 60 and Recorder 80). The seamless integration with other IVP devices via the Video Operating System (VOS) ensures that the EVP solution meets the needs of demanding video applications, as well as providing an integration platform for access control, energy management and other industry specific functions.

## H.264-SVC compression

The H.264-SVC compression delivers optimum image quality for the bandwidth available. Unlike other H.264 or MPEG4 compressions, UltraView EVP codec features true multi-streaming which allows a single encoding process to provide multiple simultaneous combinations (profiles) of image size (4CIF or 2CIF, CIF, QCIF) to be extracted at various frame rates. This flexibility allows the customer much greater control, managing and optimizing bandwidth needs across the network. Furthermore, the scalable H.264-SVC stream doubles the number of simultaneous video streams that can be displayed on client workstation compared to other H.264 compression schemes.

## Ordering Information

Part No.	Description
UVE-101	UltraView Encoder 10 (Discovery 105E): Single Channel H.264-SVC Multi-Streaming Enterprise Encoder includes 1 PTZ Port, 1 Alarm Input (Power Supply Ordered Separately)
UVX-101	UltraView Encoder 10 (Discovery 105E): Single Channel H.264-SVC Multi-Streaming Enterprise decoder includes 1 PTZ Port, 1 Alarm Input (Power Supply Ordered Separately)

