

## H.264 - 4:2:2 Encoder

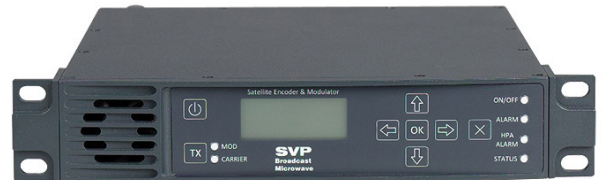
The HEN-70 is the new encoder developed by SVP Broadcast Microwave. SVP has reached the state of the art with this encoder, so it is ideal for portable use when the highest quality available on the market is required.

This device is an H.264 encoder, which can work with 3G, HD and SD input signals, being able to detect automatically the video input format. For added security, the signal can be encrypted using BISS or AES (optional) encryption technology.

This encoder has several analog and digital video interfaces (3G-SDI, HD-SDI, SD-SDI, HDMI and Composite video) as well as several audio interfaces (SDI embedded, AES digital, HDMI embedded and Analogue).

The HEN-70 also provides a network interface for transport stream over IP as well as ASI output; this allows sending the signals over IP based networks.

The small size and lightweight make the HEN-70 encoder the suitable equipment to be used in broadcast and professional applications, such as satellite uplinks, point-to-point radio links and many other uses.



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### APPLICATIONS



Satellite News Gathering (SNG)



Point-to-Point IP Radio Link

### FEATURES

- Superior encoding quality and performance (NTT technology)
- H.264 HD/SD 4:2:2/4:2:0 encoder
- Highest video quality available: 1080p/50", 1080p/60, 3G-SDI
- Lowest Delay in H.264: 33 ms
- Input signals: Video, HD/SD-SDI, 3G-SDI and HDMI
- ASI over IP interface with FEC
- BISS-1 and BISS-E encryption

### OPTIONS

- AES-128 and AES-256 encryption

### APPLICATIONS

- ENG/OB
- SNG
- High-performance encoder.
- Point-to-Point IP radio link

## Characteristics

### Encoder

Video compression:	H.264 / MPEG-4 Part 10
Profile:	High 422, High, Main
Level:	4.1 / 4.0 / 3.2 / 3.1 / 3.0
Latency:	Minimum delay: 33 ms
Audio compression:	MPEG-1 Layer II
Audio bitrate:	128, 192, 256 or 384 Kbps
Output bitrate:	1 Mbps - 100 Mbps

### Encryption

BISS:	BISS-1 and BISS-E
AES:	AES-128 and AES-256 (optional)

### Video

Inputs:	3G-SDI SMPTE-425M-A (299M) HD-SDI SMPTE-292M (299M) SD-SDI SMPTE-259M (272M) HDMI (1.4a) CVBS
Formats:	<b>1080p</b> (1920x1080) - 23.98/ 24/ 25/ 29.97/ 30/ 50/ 59.94/ 60 Hz <b>1080i</b> (1920x1080) - 50/ 59.94/ 60 Hz <b>720p</b> (1280x720) - 23.98/ 24/ 25/ 29.97/ 30/ 50/ 59.94/ 60 Hz <b>576i</b> (720x576) - 50 Hz <b>480i</b> (720x480) - 59.94 Hz

### Audio

Input :	SDI embedded/ AES Digital / Analogue / HDMI embedded
Analogue:	2 Stereo / 4 Mono
SDI embedded:	1 group (4 audio channels)
AES/EBU:	2 stereo channels

### Data Channels

Data channel:	User data or GPS data
Data rate:	1,200 to 57,600 bps

### Test Signals

Video:	Bars with moving icon
Audio:	4 audio tones

### ASI and IP

Input and Output:	ASI Transport Stream (EN50083-9) Transport Stream over IP (SMPTE 2022/CoP3) - FEC 188/204 byte packets Max. TS packets / IP packet: 7
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### Control and Monitorization

Control Interfaces:	Front panel and display Web browser interface SNMP
Monitoring:	Encoding parameters Status Alarms and warnings

### Power Supply

AC input:	100 to 240 V
DC input:	8 to 36 V

### Mechanical

Size:	1/2 RU, 233.16 mm depth (without connectors)
Weight:	1.4 kg

### Environmental

Temperature range:	-10 to 45 °C
Consumption:	< 20 W
Height:	4,500 m
Humidity:	95%



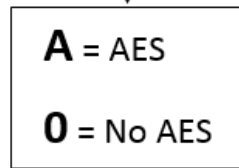
Multiple HDE-70 encoders with an IP Radio Link

H.264 4:2:2



How to order

**H E N - 7 0 - A**



**AES Encryption**