



## UE-9000 Series Universal Encoder

The versatile UE-9000 series provides a universal solution for current and future encoding needs. The platform enables smooth migration path from MPEG-2 to H.264, allowing either or both formats to be transmitted concurrently over ASI and IP networks. The UE-9000 can be integrated into an open or close-loop statistical multiplexing architectures to provide superior image quality

### Models description

The UE-9000 series features 5 distinct product lines:

- UE-92X0 - MPEG-2 Multi-Channel Encoder
- UE-93X0 - MPEG-2 / H.264 Encoder
- UE-94X0 - H.264 Encoder
- UE-9500 - Audio-only Encoder
- UE-9217/9318 - DVB-S / DVB- S2 DSNG Platform
- UE-9800 - HD H.264 Encoder (Future release)

### Series Highlights

- Up to 2 channel MPEG-2 encoding
- Dual-channel H.264 encoding
- Simultaneous H.264 / MPEG-2 encoding
- 1 dual pass MPEG-2 channels
- CBR/VBR support
- Simultaneous IP and ASI outputs
- Up to 8 audio channels
- Advanced muxing for cascading and multi-services
- Integrated SCTE-35 detection
- DVB/ATSC compliance

### Business Benefits

Simultaneous encoding of MPEG-2 and H.264 supports future and current networks

Multi-channel encoding reduces operational costs

Versatile platform for future upgrades

Integrated IP, ASI and satellite (DSNG model) outputs

Dedicated DSNG unit supporting DVB-S/DVB-S2

# UE-9000 Series Applications

## Dense Architecture Platform

### UE-92x0 - MPEG-2 Multi-Channel Encoder

The UE-92x0 platform offers superb cost-effective multi-encoding capability. Housed in a 1RU slim-line chassis and featuring low power consumption, the UE-9000 platform can encode up to 4 independent MPEG-2 video channels and 8 stereo channels, generating one multi-program transport stream. The unit provides simultaneous IP and ASI outputs and can be managed by an intuitive web-based user interface. Integrated network interfaces enable effortless integration with cable, satellite or Telco networks and eliminate the need for external network adaptors.

The UE-9000 includes innovative integrated analog cue tone detection, so no external cue tone detection unit is needed, and features SCTE-35 digital cue tone insertion (CableLabs tested).

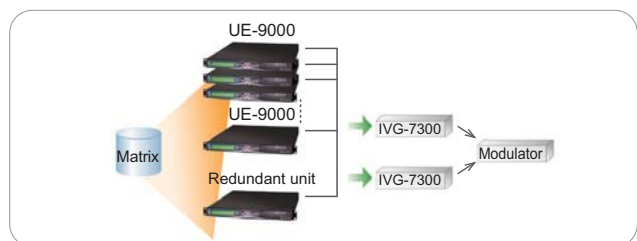


## Dual-Pass Statistical Multiplexing

The UE-9000 dual-pass solution leverages Scopus' TriplePass™ technology to meet rigorous statistical encoding needs, today and into the future. It can be used in open- or closed-loop architectures. With a simple software upgrade, the UE-9000 can serve as part of a statistical multiplexing system.

The UE-9000's dense encoding architecture enables it to encode two dual-pass channels in a 1RU chassis. Together with the IVG-7000 and a network management system, the UE-9000 forms a complete statistical

multiplexing system that needs only half the rack space of other solutions.

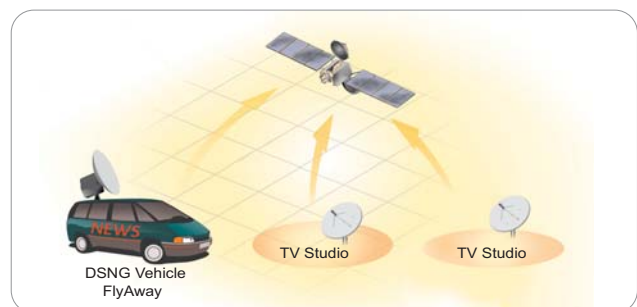


## Satellite News Gathering

### UE-9xx8 DSNG - DVB-S2 Encoder

Scopus' DSNG unit features DVB-S2/DVB-S capabilities, a software upgrade to H.264 and simultaneous IP and satellite outputs.

Based on Scopus' extensive DSNG experience, the UE-9xx8 is a state-of-the-art unit featuring a low-delay mode, front panel control and cascading capabilities that provide superb video quality.

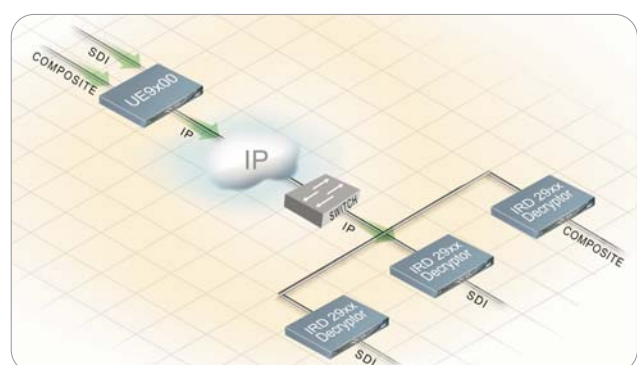


## H.264

### Point-To-Point Contribution / Distribution:

- UE-9310 - MPEG-2 / H.264 Encoder
- UE-9410 - H.264 Encoder

The UE-9310 is Scopus' solution to the migration from MPEG-2 to advanced Encoding scheme. Enabling simple s/w upgrade to H.264 and with IP and ASI outputs, the unit support both legacy and future needs. The UE-9410 with its native H.264 and IP outputs is Scopus' solution for IPTV, ready for integration into Scopus Network Management System.



# UE-9000 Series Highlights

---

## Inputs

### Video

- UP to 2 video inputs
- Simultaneous MPEG-2/H.264
- Video formats: NTSC/PAL
- Input format: C/V and/or SDI

### Video resolution

- Horizontal: 720, 704, 640, 544, 528, 480, 368, 352
- Vertical:
  - NTSC-480, 240
  - PAL-576, 28

### Audio

- UP to 8 stereo channels
- Input format: Analog/AES/EBU/embedded
- Dolby Digital (AC-3) pass-through (optional)
- Integrated sample rate converter (SRC)

### ASI Input

- Built-in multiplexer for encoder cascading
- Passive loop-through for cascading redundancy
- Up to 40Mbps

---

## Pre-Processing

- Analog/Digital TBC, frame synchronizer
- Automatic frame re-sizing
- 3:2 pull down

- Adaptive filters according to video content
- Human Visual Preceptiview™ filter (optional)
- Advanced dynamic noise reduction (optional)

---

## Video Processing

### Video encoding formats

- MPEG-2 4:2:0 MP@ML
- MPEG-2 4:2:2 MP@ML
- H.264 MP@L3

### VBI processing

- CC
- WSS
- Teletext (WST)
- VPS

### Audio encoding formats

- MPEG-1 Layer 2 (Musicam)
- Dolby Digital 2.0 (AC-3)
- AAC (LC)

---

## Output

### DVB interface

- 3xASI outputs

### Output Rate

- Up to 80Mbps

### IP Output

- 1xIP output
- 10/100 BaseT
- UDP/RTP
- Supports M-SPTS

### L-Band Modulator

- DVB-S/DVB-S2
- Frequency range 950-1750 MHz
- L-Band monitoring
- QPSK/8PSK/16QAM/16APSK

---

## Control and Monitoring

### Remote

- Web-based management
- SNMP agent

### Local

- Graphical easy-to-use front panel with quick access keys and alphanumeric keypad

### SW upgrade

- Compact Flash disk

### Dry contact alarms (GPI)

- 1 output for various status and faults

### Presets

- Up to 64 different configurations

---

## Physical Characteristics

### Size

- 1RU (19" rack)
- Dimensions (W x H x D):  
4.4 cm x 43.9 cm x 48.9 cm (1.75" x 17.1" x 19.1")

### Weight

- 5 kg (10 lbs)

### Power

- Voltage 90-260VAC, -48 DC (optional)
- Power consumption (Max): 30W per channel

---

## Environment

### Temperature

- Operating: 0°C - 50°C
- Storage: -20°C - -70°C

### Humidity

- 85% non-condensing

---

## Compliance

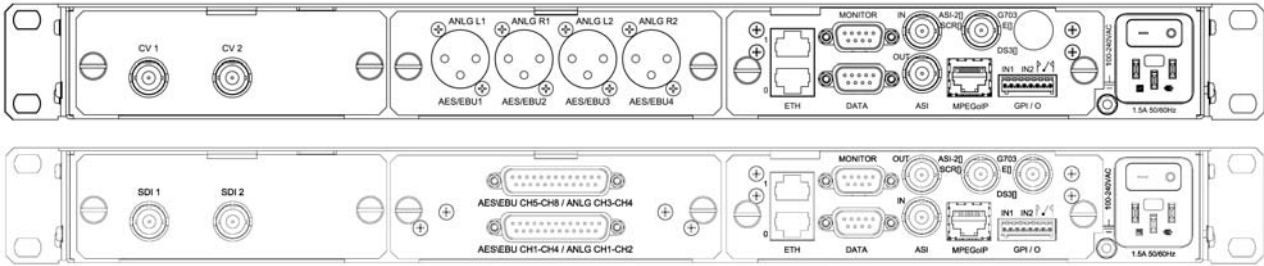
- FCC part 15

### Safety

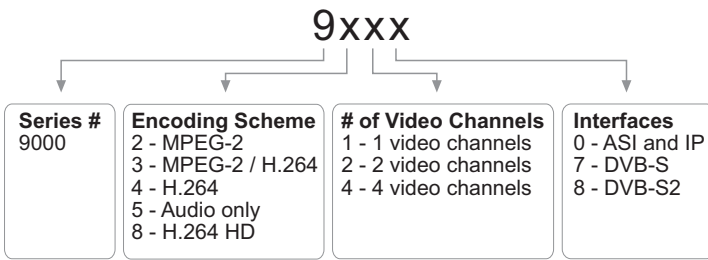
- in accordance with EN 60950

---

\* The above features apply to the UE-9000 Series overall. For detailed model specifications please refer to product data sheets



# UE-9000 Series Configurations



## Basic features

- IP output
- Up to 3 ASI outputs
- ASI input for cascading of up to 16channels
- Cascading redundancy
- Pre-programmed set-ups
- Analog and/or SDI video inputs
- 4 stereo channels (Dolby/AAC/ Musicam)
- GPI output
- Web management
- Front panel control

	9210	9220	9310	9410	9500	9217	9318	9810
MPEG-2 encoding	Y	Y	Y	-	-	Y	Y	O
4:2:2 upgrade	O	O	O	-	-	Y	Y	-
H.264 encoding (s/w upgrade)	-	-	O	Y	-	-	O	Y
Dual-Pass closed-loop statistical multiplexing	-	O	-	-	-	-	-	-
Open-loop statistical multiplexer	O	O	O	-	-	-	-	O
Integrated DVB-S +U/C	-	-	-	-	-	Y	Y	-
Integrated DVB-S2 +U/C	-	-	-	-	-	O	Y	-
Additional 4 stereo channels	-	O	-	-	Y	-	-	-
Additional radio and data services	O	O	O	O	Y	O	O	O

Y - Basic feature    O - Optional    “-” - Not supported    **Check for specific model availability**

**Americas**  
Tel:+1 609 9878090  
Fax:+1 609 9878095  
www.scopus.net  
info@scopusamericas.com

**Argentina**  
Tel:+54 11 52354565  
www.scopus.net  
info@scopusamericas.com

**Brazil**  
Tel:+55 12 39239208  
www.scopusbrasil.com.br  
scopusbrasil@scopusbrasil.com.br

**China**  
Tel:+86 10 65880035/6/7  
Fax:+86 10 65880039  
www.scopus.cn  
info@scopus.cn

**Germany**  
Tel:+49 69 95002255  
www.scopus-europe.de  
info@scopus-europe.de

**India**  
Tel:+91 22 55939291  
Fax:+91 22 55939299  
info@scopus.net

**Israel**  
Tel:+972 3 9007777  
Fax:+972 3 9007888  
www.scopus.net  
info@scopus.net

**Japan**  
Tel:+81 3 57787073  
Fax:+81 3 57176092  
info-japan@scopus.net

**Russia**  
Tel:+7 495 7893580  
Fax:+7 495 7893579  
www.scopus.ru  
info@scopus.ru

**Thailand**  
Tel:+66 1 7433485  
info@scopus.net

**UK**  
Tel:+44 208 6106038  
Fax:+44 208 6106818  
info@scopus.net

**Professional Services:  
(Tech Support)**  
Tel:+972 3 9007800  
Fax:+972 3 9007866