

# Telairity Product Line

*Telairity encoders can easily interconvert between different codecs by means of a simple software upgrade. Currently, two advanced compression standards are available: H.264/AVC or AVS (Audio Video Standard).*

## 8000 Series HD Encoders

*Single-channel 1RU chassis, 2-15Mbps output bit range*

Hardware configuration varies as required by target application. BH and BC models are designed for field use, and feature wide temperature tolerance as well as vibration-proof construction. All models offer simple, reliable “two button” front panel operation.

- **BE8110**—Basic Broadcast Encoder model
- **BH8110**—“BackHaul” encoder for ground ENG vehicles  
Dual redundant power supplies, external audio inputs (AES and analog stereo)
- **BC8110**—“Copter” encoder for aerial ENG/surveillance vehicles  
Half-width (9.5”) unit, remote control panel, 28V power supply, ruggedized chassis
- **BE8500**—Autoswitching HD/SD encoder  
Telairity’s HD encoder combined with 9000-series high-compression SD encoder option, also available in “BH” and “BC” versions

## 7000 Series SD Encoders

*Single-channel 1RU chassis, 1-8Mbps output bit range*

Our most economical encoders, featuring adjustable encode latencies from 2sec to 150ms.

- **BE7110**—Standard SD compression in a single-channel 1RU package
- **BE7400**—2-4 7000-series SD channels in a cost-effective multichannel 1RU package

## 9000 Series Encoders

*Single- and multi-channel 1RU chassis, 100Kbps-5Mbps output bit range for SD*

Twice the compression horsepower of Series 7000 encoders for ultra-low SD bit-rates. The flexible multi-channel BE9400 offers choice of SDI or analog inputs, ASI or IP outputs, HD or SD encoding channels.

- **BE9110**—Maximum compression for ultra-low SD bitrates
- **BE9400**—Four maximum-compression SD channels with choice of inputs and outputs per channel pair. Can optionally accommodate other channel types in the following combinations:
  - 2 SD channels plus 2 associated Picture-in-Picture (PIP) video streams
  - 2 HD channels
  - 1 HD and 2 SD channels

## Standard Features of Models

- **All Models**
  - H.264/AVC or AVS video encoding
  - User-adjustable encode latency from 2 seconds to 150 milliseconds
  - MPEG-1 Layer 2 or AAC-LC audio encoding
  - Automatic detection of input formats
  - “Instant” on, restart
  - Dual ASI and IP outputs
  - Forward error correction, Type Of Service (TOS) on IP output
  - Adjustable preprocessing (noise) and deblocking filters
  - Slice-based architecture for transmission robustness, fast signal lock
  - Stutter-free video on asynchronously switched inputs
  - Web browser control
  - Full upgradeability via software download
  - Compact 1U rack-mountable chassis
  - Highly reliable Telairity technology
  - Unconditional one-year Telairity warranty
- **Bxx110 Models**
  - Simple, profile-based “two button” front-panel control
  - Upgradeable to BE8500 dual-mode HD/SD operation
- **BH/BC Models**
  - Very wide temperature tolerance
  - External audio inputs for AES and analog stereo
- **BH Models**
  - Dual redundant power supplies
  - Breakout cables for external audio
- **BC Models**
  - Half-rack width
  - Remote control panel (tethered)
  - 28V power supply
  - Ruggedized chassis
- **Series 9000 and 7000**
  - Selectable GOP Pattern
  - CIF format
- **Series 9000**
  - Reduced frame rates (one-third, one-half, two-thirds input fps)
  - Baseline profile for mobile applications

## Configurability

Use of common hardware, software, and form factors to implement encoding systems, combined with Telairity’s unique control over all aspects of its encoding technology—from video processor through circuit board to packaging design—allows Telairity customers the freedom to specify their own unique combination of requirements. These can be as simple as a new combination of existing products, e.g.,

- BH7110 – a companion SD BackHaul encoder to the BH8100 (all the same hardware features)

Or a requirement for capabilities not offered standard with any current Telairity encoder, e.g., a different audio or video codec, new source inputs, different output formats, different input voltages, etc. Depending on the nature of the request, adding the feature can be as simple as including an explicit request for the feature when an order is placed, or as complex as launching an entire new project with our custom engineering team. In short, Telairity encoding technology is more than just another encoder product line. It is a set of encoding solutions that can be custom tailored to fit any encoding needs.