

## Ultra-Compact Video Encoder and Bonded Cellular Transmitter

Haivision Air is a range of mobile video transmitters for broadcasting live news, sports and other types of events from anywhere over bonded cellular and IP networks. Designed to be extremely compact and portable, the Haivision Air transmitter encodes high quality video from SDI and HDMI sources, to H.265/HEVC or H.264/AVC at very low latency. Real-time video streams can then be transmitted with SST (Safe Streams Transport) over a bonded pair of 3G/4G or 5G modems, depending on the model. Haivision Air can also transmit live video over the public internet the SRT protocol with Ethernet or WiFi connectivity.

Other advanced features include the ability to simultaneously record live broadcasts which can be forwarded on as a progressive file, automatically sent as a clip once a recording has finished or stored on a local SD card. Haivision Air operators also benefit from receiving low latency return feeds to an external display and bidirectional IFB audio for real-time interaction with the production team. All of these features and more can be easily accessed from the Haivision Air's intuitive front panel display.



### Simple

Haivision Air features an intuitive user interface enabling camera operators to broadcast live in seconds.



### Versatile

Compact, lightweight, and featuring a rechargeable battery, the Haivision Air is the ideal travel companion for camera operators and mobile journalists who need to go live at any time.



### High Performance

Encode, record, and transmit HD video in HEVC or H.264 at very low latency for reliable and high-quality sports, news, and live event coverage.



### Any Network

Haivision Air supports the Emmy® award winning SST (Safe Stream Transport) and SRT (Secure Reliable Transport) protocols for reliable video streaming over bonded cellular and IP networks.

	AIR320-5G	AIR220-5G	AIR220	AIR200
H.265/HEVC encoder	•			
H.264/AVC encoder	•	•	•	•
Embedded cellular modems	5G/4G/3G	5G/4G/3G	4G/3G	
4 extension links (Wi-Fi, Ethernet, USB)	•	•	•	•

## Main Functions

**Live & Auto-Record** Broadcast premium quality video live over bonded cellular and IP networks: 5G/4G/3G, Ethernet, Wi-Fi, and satellite Ka and Ku Bands. Live broadcasts can be simultaneously recorded on an SD card.

**Rec & Progressive Fwd** For non-live applications, video files can be shared with production as they are being recorded or automatically forwarded once a recording is complete.

**Data Bridge** Leverage SST's bidirectional data support by using a Haivision Air as a mobile router for establishing a high-speed internet connection from anywhere.

**Video Return and IFB** Ensure communication between the producer, camera operator & on-air talent with high-quality HD return feeds and bidirectional audio intercom.

**VIDEO**

*Standards*

HD: 1080p25/29.97/30/50/59.94/60,  
1080i50/59.94/60,  
720p50/59.94/60

SD: PAL, NTSC

*Encoding*

H.265/HEVC 4:2:0, 8-bit  
H.264/AVC 4:2:0, 8-bit  
Dynamic resolution adjustment

*Bitrates*

200 Kbps to 20 Mbps  
Constant Bitrate (CBR)  
Variable Bitrate (VBR)

*Inputs*

SDI, HDMI

**AUDIO**

*Encoding*

AAC-LC

*Bitrates*

32 Kbps to 256 Kbps

*Mode*

Mono, Dual Mono or Stereo 2.0

*Density*

Up to 4 channels

*Inputs*

Embedded (SDI, HDMI), Analog (L/R)

**NETWORK CONNECTIONS**

*Cellular*

2 x 5G/4G/3G or 2 x 4G/3G worldwide compliant modems with high gain custom antennas (sub-6 GHz).

Extensible with external modems (2 x USB ports).

*Ethernet*

Gigabit Ethernet port  
- LAN, WAN  
- Portable satellite (BGAN, Ka and Ku Band)

*Wi-Fi*

Dual band Wi-Fi modem 802.11b/g/n/ac (MIMO 2.4 GHz and 5 GHz)  
- Client & Hot Spot modes  
- High-efficiency embedded antenna

*Transport Protocols*

SST over Cellular/Ethernet/Wi-Fi (bonding)  
SRT over Ethernet (caller and listener modes)

**ADVANCE FEATURES**

Dual encoding for simultaneous Live & Record  
Sub second glass-to-glass latency (down to 500 ms)  
Video and Audio level preview  
Intercom /IFB  
Video return from Studio (full HD, sub-second latency)  
Automatic Live Start  
Network links priorities (user configurable)  
Data Bridge for switching the device as a mobile router  
Hot folder mode for enabling smart and automatic files Forward  
AES scrambling  
Geolocation (GPS and Galileo)

**INTERFACES**

1 x 3G-SDI input (BNC), 1 x 3G-SDI output (BNC)  
1 x HDMI 1.4 input, 1 x HDMI 1.4 output  
1 x RJ-45 Ethernet  
2 x USB 3.0 (type-A)  
1 x 3.5 mm audio jack (for IFB / intercom headset)  
2 x mini XLR balanced (for analog audio)  
1 x SD card slot  
4 x micro SIM slots

**CONTROL & MONITORING**

On screen display  
Web GUI (through laptop, smartphone, etc.)  
from Haivision Manager Management System  
from Haivision Streamhub Transceiver

**POWER**

*Power Supply*

Internal 48Wh battery (up to 3 hours)  
DC input 19V

**PHYSICAL**

*Dimensions (W x H x D)*

15.8 cm x 6.6 cm x 12.0 cm  
(6.22" x 2.36" x 4.72")

*Weight*

AIR3: 1.21 Kg / 2.67 lbs (w/ battery)  
0.97 Kg / 2.14 lbs (w/o battery)  
AIR2: 1.08 Kg / 2.38 lbs (w/ battery)  
0.85 Kg / 1.87 lbs (w/o battery)

*Operation Temperature*

0°C to 45°C (32°F to 113°F)

System Overview

