

AIR Series



ULTRA COMPACT HEVC BONDED CELLULAR TRANSMITTER



The AIR Series is a range of mobile H.265/HEVC (and H.264/AVC) encoder & transmitter that enables video professional to broadcast news, sports or field events from any location around the world, as well as web streaming to social networks.

Designed in a very compact ruggedized enclosure along with a long life internal rechargeable battery and a large set of audio and video interfaces, the AIR Series supports the best state-of-the-art H.265/HEVC encoder offering premium HD and SD video quality with less data use, and low latency (down to 0.5 sec). The solution features 2 embedded cellular modems (2 x 3G/4G or 2 x 3G/4G/5G) plus additional extension links combined and controlled by SST (Safe Streams Transport) protocol. This technology powered by AVIWEST is an intelligent IP bonding stack offering a set of powerful contribution network protocols. The 3G/4G units are also ready for 5G networks thanks to an hardware upgrade path.

The AIR series covers a large set of use cases, including live broadcast with (or without) simultaneous record. It also supports video recording only on the embedded SD card. The record file can be transferred after the clip is fully recorded but also during the record if the studio needs near real time delivery. During Live sessions, the AIR Series also enables the field crews to watch on-air program or teleprompting information coming from the Studio, with sub-second latency, on external display. All these operations are easy to trigger locally from the ergonomic display or remotely from the Studio.



SIMPLE

AIR Series has been designed with ease-of-use in mind, the user-friendly intuitive interface allows broadcasting live videos in matter of seconds.



VERSATILE

Used as backpack lightweight solutions, the AIR Series is the ideal companion for on-the-go video professionals that need robust and reliable solution, without compromise on performance and picture quality.



HIGH PERFORMANCE

By implementing the best state-of-the-art H.265/HEVC hardware encoder in a compact design enclosure, the AIR Series enables video professionals to provide seamless high quality sport and event coverage.



ANY NETWORKS

The AIR Series supports the Emmy® award winning SST (Safe Stream Transport) and SRT (Secure Reliable Transport). They ensure the transport of live video in the midst of unpredictable and unmanaged networks. SST offers multi-cellular networks bonding, while SRT, an open source protocol, brings ultra-robust transmission over wired networks.

PRODUCTS COMPARISON CHART

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

MAIN FUNCTIONS

LIVE & AUTO-RECORD

Broadcast premium quality video live over bonded IP networks : 3G/4G/5G, Ethernet, Wi-Fi, and satellite networks such as BGAN, GX and Ka Band. Combined with the automatic record feature, you can simultaneously record this live on the pluggable SD card with different resolution and bitrate to ensure an optimal and constant video quality.

REC & PROGRESSIVE FWD

Record broadcast-grade quality video on the SD card, and optimize your time by forwarding the file progressively whereas the record is still in progress. This forward approach enables fast and error-free video delivery.

DATA BRIDGE

By leveraging the transmitter's aggregated networks connections, switch the unit to behave as a mobile router in order to benefit a high speed internet connection from anywhere.

VIDEO RETURN

Receive and watch high quality HD feed from the Studio during live sessions or when the device is idled. With sub second latency delivery, it is especially design for receiving on-air program, teleprompting information or ensuring confidence monitoring from the field.

MAIN SPECIFICATIONS

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 3G/4G/5G or 2 x 3G/4G 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, GX, 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)

ADVANCED 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 AVIWEST MANAGER Management System
from AVIWEST 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 0.97 Kg / 2.14 lbs	AIR2: 1.08 Kg / 2.38 lbs 0.85 Kg / 1.87 lbs	(w/ battery) (w/o battery)
OPERATION TEMPERATURE	0°C to 45°C (32°F to 113°F)		

SYSTEM OVERVIEW

