AIR Series

HEVC

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 3G/4G-LTE modems plus additional extension links combined and controlled by SafeStreams© technology. This technology powered by AVIWEST is an intelligent IP bonding stack offering a set of powerful contribution network protocols.

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. All these operations are easy to trigger from the ergonomic display.

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

Leveraging AVIWEST's SafeStreams technology, AIR Series ensures the delivery of live video even in the midst of unpredictable and unmanaged network conditions by aggregating simultaneously multiple network connections dynamically adapting the video bitrate, protecting stream content and supporting retransmission of lost data.

PRODUCTS COMPARISON CHART

	AIR320	AIR300	AIR220	AIR200
H.265/HEVC encoder	●	●		
H.264/AVC encoder			●	●
2 internal cellular modems	●		●	
4 extension links (Wi-Fi, Ethernet, USB)	●	●	●	●

MAIN FUNCTIONS

LIVE & AUTO-RECORD

Broadcast premium quality video live over bonded IP networks : 3G/4G-LTE, 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.

RECORD & PROGRESSIVE FORWARD

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.

MASSIVE FORWARD

Forward any types of file from mass-storage devices (SD card or USB key) over bonded IP networks. You can select all or a subset of files for transmitting.

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 40 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

INTEGRATED MODEM	2 x 3G/4G-LTE modems with high gain custom antennas
ETHERNET	Gigabit Ethernet port - LAN, WAN - portable satellite (BGAN, GX, Ka Band)
WI-FI	Dual band Wi-Fi modem 802.11b/g/n/ac (MIMO 2.4GHz and 5 GHz) - Client & Hot Spot modes - High-efficiency antenna

ADVANCED FEATURES

AVIWEST SafeStreams technology
Sub second glass-to-glass latency (down to 500ms)
Dual encoding for simultaneous Live & Record
MPEG-2 TS recording
Geolocation (GPS, Glonass, Galileo and Beidu)
Intercom / IFB

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)
2 x mini XLR balanced (Mic in / Line in / Line out)
1 x SD card slot
4 x micro SIM slots

CONTROL & MONITORING

On screen display
Web GUI (through laptop, smartphone, etc.)
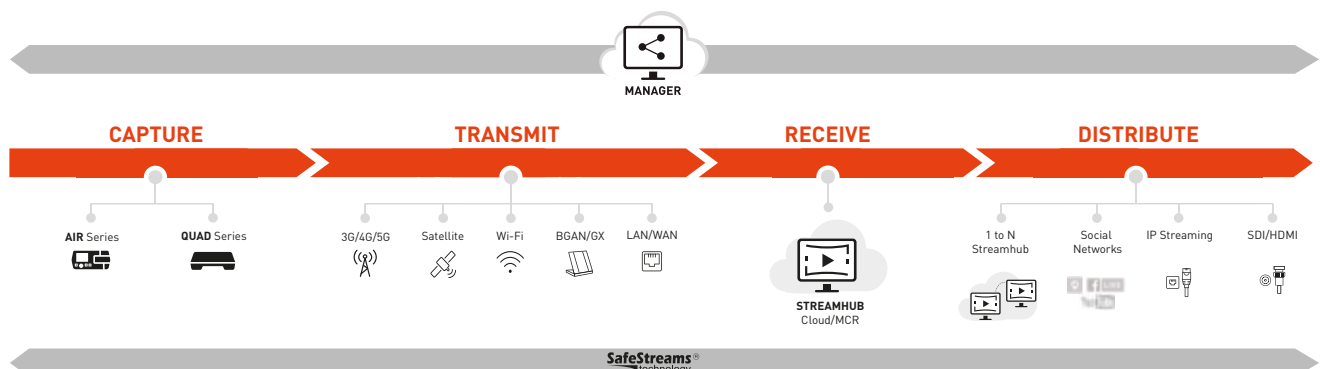from AVIWEST MANAGER Management System
from AVIWEST STREAMHUB Transceiver

POWER

POWER SUPPLY	Internal 48Wh battery (up to 3 hours) DC input 12V-24V

PHYSICAL

DIMENSIONS (W x H x D)	15.8 cm x 6.6 cm x 12.0 cm (6.22" x 2.59" x 4.72")
WEIGHT	1,1 Kg / 2.42 lbs
OPERATION TEMPERATURE	0°C to 45°C (32°F to 113°F)

SYSTEM OVERVIEW

MANAGER

CAPTURE
AIR Series   QUAD Series

TRANSMIT
3G/4G/5G   Satellite   Wi-Fi   BGAN/GX   LAN/WAN

RECEIVE
STREAMHUB
Cloud/MCR

DISTRIBUTE
1 to N Streamhub   Social Networks   IP Streaming   SDI/HDMI

SafeStreams® technology