

# LiveStreamPac

The LiveStreamPac is able to stream a high quality live video to the receiver unit, LiveStreamPac Studio by using up to four 3G or 4G bonded networks. These transmissions are based on the use of bonded 3G or 4G networks but some other networks can also be used:

- Wi-Fi
- WiMAX
- Ethernet: LiveStreamPac can be connected directly to an Ethernet network to stream a live video.
- Satellite: LiveStreamPac is also integrated with the INMARSAT BGAN antennas



## Key Features

## LiveStreamPac

### Size and Weight

- The product is small and light enough to be carried on the belt or even on the pocket of a jacket.

### Live & Store and Forward

- LiveStreamPac is able to send a live high quality video down to the reception site using several bonded 3G/4G networks but is also able to record the video on SD card (up to 32GB). This can be very useful when operating the system where no 3G networks are available. The files can be pushed down to the reception site very quickly when network availability is back. Live & Store can be combined together (auto-record).

### Intercom channel

- Intercom channel allows an extra full duplex audio channel to be established between the LiveStreamPac unit and the Studio.

### Power Consumption and battery life

- LiveStreamPac is based on a powerful dedicated hardware platform. The power consumption is very low compared to a PC-based platform. The internal battery life is up to 2000 cycles of charge/discharge. It can be easily replaced by a new one.

### Easy to Use

- LiveStreamPac is very easy to use. No technical training and knowledge is needed. The GUI is intuitive enough to be used without any specific training.

### Reliability

- LiveStreamPac is not a PC based platform. There is no moving part such as fan or hard disk. This gives LiveStreamPac a very high MTBF. The product can support shocks and vibration (in a car) without causing failures.

### Proven and deployed solution

- LiveStreamPac is already deployed by a large number of TV channels across the world.

### Low operating cost

- No additional infrastructure has to be deployed to use the LiveStreamPac system and the cost of the 3G services are very low compared to any other kind of solutions (satellite ...)

# LiveStreamPac Studio

## Easy to Use

- LiveStreamPac has an intuitive graphical user interface. No specific training is needed to use the system.

## Live & Store

- LiveStreamPac is able to decode the incoming streams coming from up to 4 LiveStreamPac.
- LiveStreamPac can record on files the incoming streams coming from the remote LiveStreamPac. These files can be played back using the LiveStreamPac Studio video server capabilities.

## Solution

*The LiveStreamPac Solution exists in Two elements: The LiveStreamPac and the LiveStreamPac Studio. The LiveStreamPac Studio has the ability to simultaneously receive and output up to 4 separate LiveStreamPacs.*

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## Technical Specs

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<b>Product Name</b>	<b>LiveStreamPac</b>
<i>Ambiant operating temperature</i>	0°C to 50 °C
<i>Ambiant operating humidity</i>	10% to 85% (no condensation)
<i>Weight (including batteries)</i>	746 grams
<i>Dimensions (W x H x D)</i>	121 mm x 38 mm x 168 mm
<i>Analog Composite input</i>	Yellow RCA Connector Input impedance : 500 kOhms Input Voltage Range: 0.75 Vpp
<i>SDI input</i>	1 BNC, 75 Ohms Compliant with SMPTE 259M, SMPTE 272M and ITU-R BT.656-4
<i>Analog Stereo Audio input</i>	Left: White RCA Connector Right: Red RCA Connector Sampling Frequency: 32 kHz – 48 kHz Input impedance: 20kOhms Full-scale input voltage: 2.828 V Typical Dynamic range : 90 Db
<i>Headphone output jack</i>	3.5 mm stereo mini jack Stereo headphone output load resistance : 16 Ohms
<i>Ethernet Data</i>	10/100 BT RJ-45 connector
<i>Microphone input jack</i>	3.5 mm stereo mini jack
<i>USB for external modems</i>	4 x Type A connectors USB 2.0 Full/High Speed Only USB Modems provided by Aviwest can be connected
<i>LED Touch Screen</i>	3.4" 480x272, 16M colors Resistive Touch Screen
<i>Front Panel LED indicators</i>	Red front LED: « On air » Green front LED: « Connected »
<i>Side Panel LED indicators</i>	3 LEDs for battery status: In charge: « Battery is being charged » Charge done: « Battery is Full » Ext.12V: « DC Adapter plugged »

<i>On/Off Switch</i>	Gently press the button 2 seconds to switch on or off the system. The switch is not coupled with internal battery charge which operates as soon as the DC input is detected. Internal LED indicates system activity.
<i>SD Card</i>	SDHC up to 32 GB Requires adapter for Mini SD and Micro SD cards
<i>DC input</i>	Power Jack connector (standard polarity) Ref: jack Switchcraft 712RA (mates with plug Switchcraft 760K ) Voltage: +12V DC Nominal Current: 2 A max Nominal Current + Charge Current : 3.3 A max Reverse polarity protection by Fuse Minimum voltage transient protection: 13.3V Fuse opening time at 200% Amp. rating: 5s
<i>External AC/DC Adapter</i>	Power Source: 100-240V AC, 50/60Hz Use of DC adapter provided by LiveStreamPac is recommended
<i>System Batteries</i>	Lithium Polymer 2 cells 7.2V 3000 mAh
<i>Real Time Clock Batteries</i>	Lithium metal 1 cell 3V 7mAh
<i>Typical autonomy</i>	2 hours encoding and streaming (autonomy is variable depending on choice between SDI or Analog inputs and the number of modems used)
<i>Max autonomy</i>	Up to 3 hours encoding and streaming with modem and Analog inputs
<i>Video Encoding Format</i>	H.264 High Profile Level 4.0

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## Technical Description

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<i>Video Resolutions</i>	HD, Full D1, Half D1, CIF, QCIF
<i>Audio Encoding</i>	HE-AAC v2, stereo & dual mono modes, 48KHz