

Virtual APT IP Codec

Virtualized APT solutions for Audio/MPX over IP

In line with the market's transition to offer both hardware and virtualized solutions, the famous **APT IP Codec** is now available as a software solution – the **Virtual APT IP Codec**.

This shift to virtualization is strategic in reducing the amount of equipment to purchase, thereby offering important upfront and operational cost savings to broadcasters.

As its hardware sibling deployed on thousands of sites worldwide, the Virtual APT IP Codec is a cutting-edge, professional transport solution geared up with unique, market-leading technologies.

It supports **APTmpX**, the highest quality MPX compression algorithm, and **SureStream**, for robust, low cost, and low latency transport over IP.

The Virtual APT IP Codec is also enhanced by **Virtual ScriptEasy** for advanced automation, and **Kybio**, for end-to-end monitoring and control of the codec fleet.

Server-based, and fed by AES67, the Virtual APT IP Codec solution offers **high availability** and **high-density encoding/decoding** for next generation broadcast performances. Broadcasters can easily centralize and transport a large volume of program signals and scale the solution as they grow.

**Award-winning
solution**



Virtual APT IP CODEC Benefits:



High Availability, Optimized IP Transport

Benefits from the same performances as the field-proven APT hardware solutions with thousands of users worldwide. Designed with the highest reliability, 24/7 operation, and compliant with a High Availability (HA) architecture. Compatible with SureStream to compensate any packet loss, and Time Alignment to remove latency fluctuations.



Pristine Audio Quality & Performance

Using AES67, the Virtual APT IP Codec can be integrated into virtualized studios and ingest audio or MPX content transparently. Highest signal fidelity and lowest coding delay, established from the beginning with Enhanced aptX, are transferred to composite/MPX transmissions with the new APTmpX algorithm.

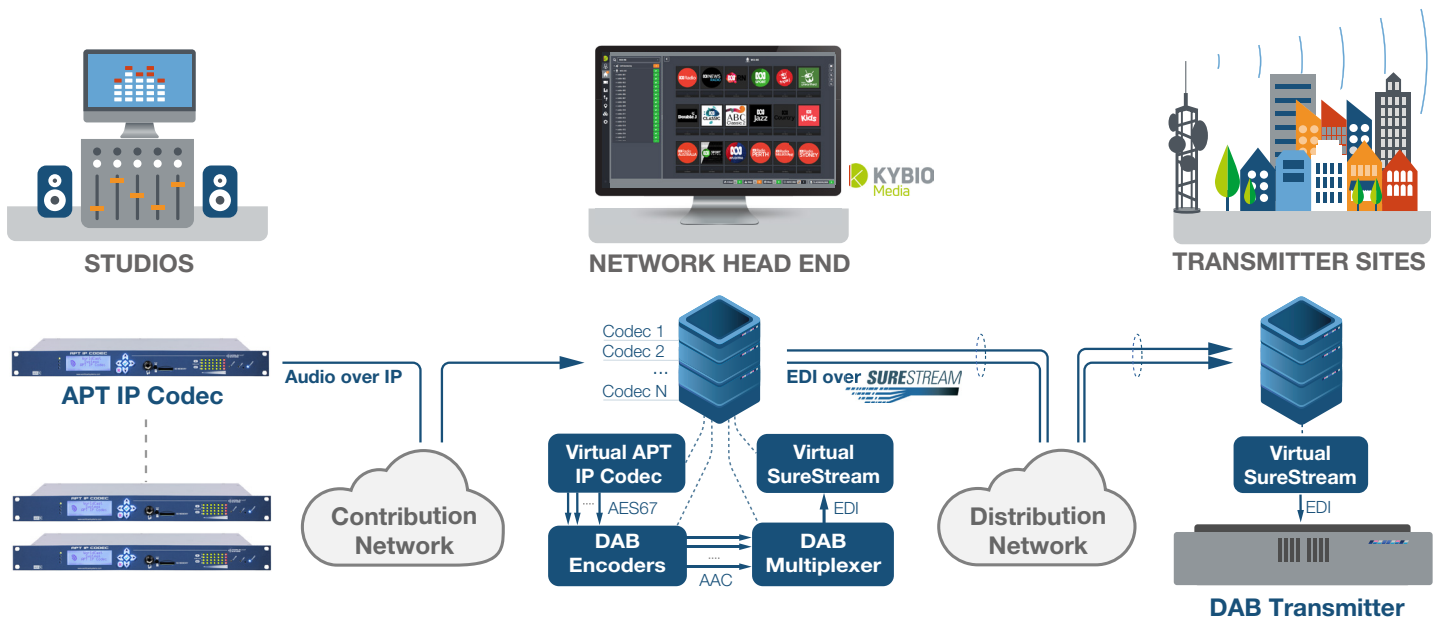


Maximize your Cost Savings

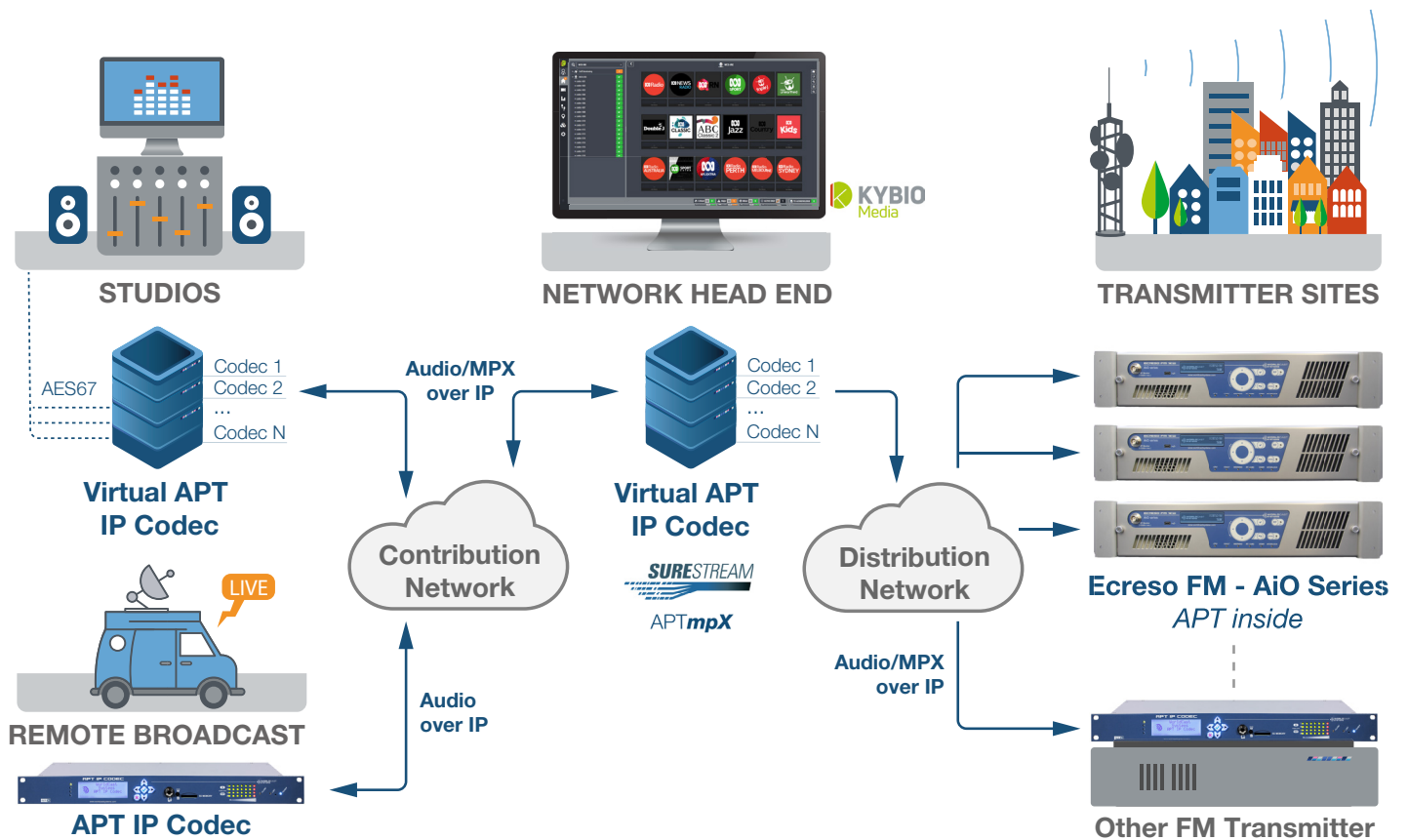
Get rid of hardware with high-density encoding/decoding from a single server. Broadcasters benefit from a flexible and scalable solution and can re-adjust their network size as needed. SureStream, Enhanced aptX, and APTmpX for low bitrate composite/MPX transmissions also contribute to high-quality distribution outside of expensive transmission paths.

Virtual APT IP Codec Endless Possibilities

Virtualized DAB/DAB+ Network



Virtualized FM Network



KYBIO



Kybio is an end-to-end, unified monitoring and control software (NMS) for media and broadcast that simplifies how you oversee all your IP equipment and infrastructures.

Regardless of network size and complexity, Kybio centralizes your key data and provides, across an intuitive web interface, access to powerful insights and tools to streamline your operations. Open, scalable, and easy to deploy, Kybio provides a unique combination of built-in modules for real-time supervision, operation support, control, as well as an advanced analytics and reporting engine.

SureStream



Low Latency-Low Costs: SureStream enables broadcasters to turn imperfect, but much cheaper services, into true broadcast grade, low-latency IP connections.

Scalability and Flexibility: SureStream is the most flexible and scalable solution for content transmission protection, able to combine multiple paths from any combination of MPLS, Satellite, Microwave, xDSL and/or Cellular (4G/5G), creating a unified, super-robust connection to get your audio from point A to B.

APTmpX



Compressed Composite/MPX: APTmpX is the world's first and only non-destructive MPX/composite algorithm to save network bandwidth. It protects the sonic signature generated by the station's sound processor settings.

Low Bitrate, Low Delay: An APTmpX sample is decodable on its own. Packet losses in the network have as little effect as those of base-band audio samples. Low delay transmission is inherent and with a bandwidth requirement of 300, 400, 600 or <900 kbps, non-dedicated IP connections can be used.

Virtual ScriptEasy



Protects your investment: ScriptEasy technology allows you to avoid off-air time using intelligent scripts and automation. Your facility becomes autonomous and can apply automatic actions for an instant service restoration.

Reduces your costs: When an intervention is necessary, Virtual ScriptEasy displays all the information needed to identify and correct equipment failure. With preventive alarm settings, you can proactively perform equipment maintenance before it fails.

DOCKER & KUBERNETES



Docker - Deployment of Virtual APT IP Codec has been made easy by our team of DevOps engineers with the usage of Docker containers providing a very powerful IP Audio Codec with a small footprint on the host server.

Kubernetes - The management of a large number of Virtual APT IP Codec instances is handled by Kubernetes, the market's best-in-class container orchestrator. Mastering this technology is part of our solution to provide the best Audio over IP distribution in a multi node environment with built-in high availability features.

“ Virtual APT solution is a great opportunity for radios to simplify and improve their program delivery while reducing their costs. ”

Gregory Mercier

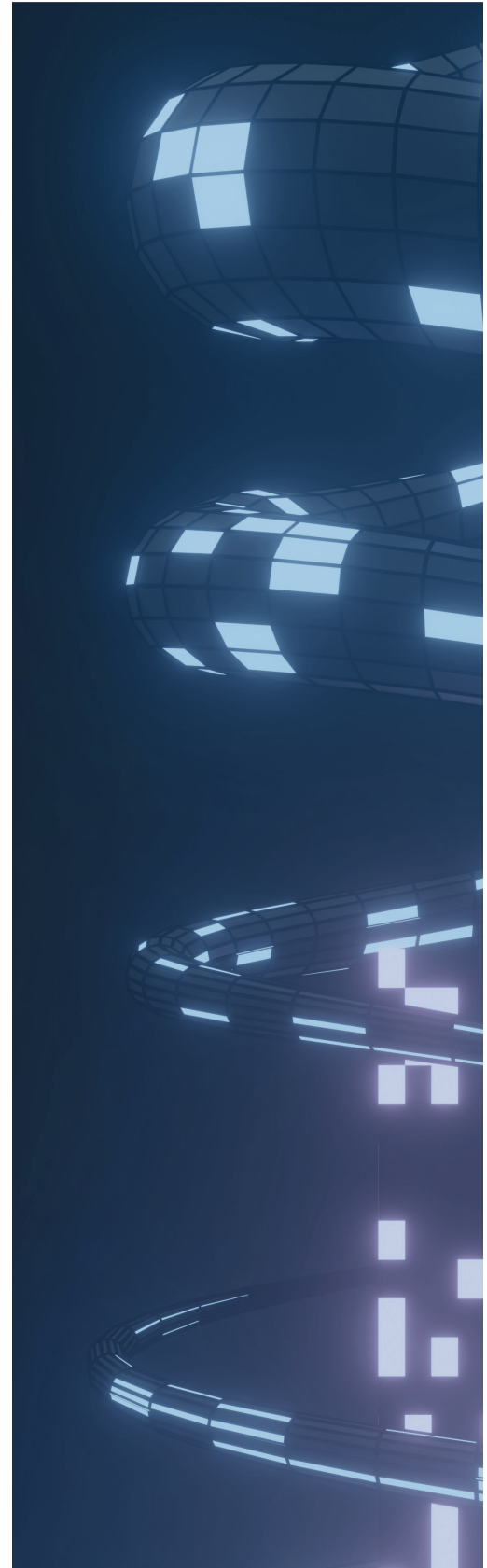
Director of Product Marketing

AUDIO FORMATS	
Input/Output	AES67
Audio algorithm	E-aptX 16/24bit, lin. PCM 16/24bit
MPX algorithm	Linear MPX 16/24bit, APtmpX @300/400/600 kbps
STREAMING MODES	
Stream types	Multiple stereo Audio, UDP and RTP forwarding, format auto-detection, Reply-to-Sender, NAT traversal mode
Jitter buffer	2 - 5000ms, packet re-sequencer
QoS	DiffServ (RFC2474) per stream
Redundant streaming	2 - 5000ms, packet re-sequencer
NETWORK	
Port configuration	Flexible WAN and/or LAN (Management) configuration
Dynamic DNS clients	Multiple clients
Standard protocols	DHCP, FTP, HTTPS, ICMP, IGMP v2/3, SMTP, SNMPv2c, NTP
Security	TLS, Service Filter and Firewall
MANAGEMENT	
Web browser GUI	
SNMPv2c	
API	
MONITORING & ALARMS	
Adjustable Silence Detectors (Inputs & Outputs)	
Event logs	
SNMP traps/notifications	

Order information

REF	DESCRIPTION
SW-VAPT-HA	Virtual APT IP Codec High Availability
SW-VAPT-1	Virtual APT IP Codec Single License Standalone
CD00123	APT SureStream option
LC00074	MPX over IP option
SW-KYB-CORE	KYBIO Media
SCE-VAPT	Deployment Service
SU-VAPT	Yearly support for Virtual APT IP Codec and Kybio Media
FORM-APT	Training or technical assistance

This document is not contractual. All specifications are subject to change without notice.



Headquarters

📍 20 avenue Neil Armstrong
33700 Mérignac (Bordeaux) FRANCE
☎ +33 (0)5 57 928 928
✉ www.worldcastsystems.com/contact-us

US office

📍 19595 NE 10th Avenue Suite A
Miami, FL 33179 USA
☎ +1 305 249 3110
✉ www.worldcastconnect.com/contact-us