Your Guide to ATSC 3.0 at the Show

presented by

ATSC
NAB
Consumer Technology Association

pearl
PHOENIX MODEL MARKET
SINCLAIR

LG  DOLBY  SONY  SAMSUNG  zenith

AWARN
Mon, April 8:
- Dallas Deployment Update
- Consumer Research on ATSC 3.0
- ATSC 3.0 National Deployment Update: Pearl
- Phoenix Model Market Technical Update
- ATSC 3.0 Consumer Device Panel
- ATSC 3.0 Conformance Testing
- Audio Enhancements for ATSC 3.0
- Real World ATSC 3.0 in Santa Barbara, CA

Tues, April 9:
- Public Broadcasting and ATSC 3.0 with WKAR at Michigan State
- Panel: Building Out the ATSC 3.0 Station
- Watermarking in ATSC 3.0
- AWARN with Next-Gen TV
- Channel Security with ATSC 3.0
- ATSC 3.0 Deployment in Korea
- Cleveland Station Update

Wed, April 10:
- Advanced Advertising and ATSC 3.0
- Measurement and ATSC 3.0
- European Interactivity Experiences and how those relate to ATSC 3.0
- Sessions will repeat late Wednesday and Thursday

Ride the Road to ATSC 3.0

Join ATSC experts at the "Riding the Road to ATSC 3.0" Presentation Stage in North Hall N2512 for detailed talks about the many facets of Next-Gen TV.

Your Guide to ATSC 3.0 at the Show

ATSC 3.0 Standards

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| **ETRI (N231)**  
Seamless convergence of broadcast and broadband networks, Terrestrial 8K broadcast using ATSC 3.0 channel bonding, ATSC 3.0 master antenna TV system |
| **IEEE Broadcast Technology Society (LN3)**  
ATSC 3.0 Roadshow seminar, being hosted at multiple locations throughout the U.S. |
| **Saankhya Labs/ONE Media/Sinclair Broadcast Group (Wynn Tower Suite)**  
5G Broadcast demo with operational converged Broadcast/Broadband across telco network infrastructure with Saankhya “Direct to Mobile” SDR Chip |
| **Society of Broadcast Engineers (LN4 Lobby North Hall Booth 4)**  
Technical educational programs and later in 2019, a new SBE certification on ATSC 3.0 |

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<th><strong>RF Transmission</strong></th>
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| **American Tower (C1633)**  
Single Frequency Networks modeling to prepare for deployment, such as the first commercial-grade ATSC 3.0 SFN in Dallas |
| **Broadcast Electronics (N6406)**  
New series of ATSC 3.0 transmitters |
| **Comark (C4409)**  
The Parallax liquid-cooled, solid-state Doherty DTV transmitter that now encompasses UHF, VHF band 3 and VHF band 1, Exact-V2 DTV exciter, full ATSC 3.0 Glass-to-Glass demo. |
| **DVEO (SU3306)**  
Cortina 4K HDR IP: ATSC 3.0 encoder ATSC 3.0 compatible MTP IP or TS outputs, TLV500E-ATSC 3.0 and ATSC 1.0 receiver/demodulator/decoder |
| **ETRI (N231)**  
Seamless convergence of broadcast and broadband networks, Terrestrial 8K broadcast using ATSC 3.0 channel bonding, ATSC 3.0 master antenna TV system |
| **GatesAir (N3303)**  
Transmitters and exciters equipped with ATSC 3.0 with operational SFN |
| **NAB and various partners (N2512, N1037, CL3)**  
Single Frequency Network (SFN) inside the LVCC North Hall and Central Lobby delivering signals to moving portable tablets outfitted with ATSC 3.0 tuners |
| **Rohde & Schwarz (SL6404)**  
ATSC 3.0 software-based implementation on its entire transmitter EVO portfolio, which includes both UHF high power liquid cooled transmitters and also the new EVO VHF liquid cooled transmitters product lines |

| **Saankhya Labs/ONE Media/Sinclair Broadcast Group (Wynn Tower Suite)**  
5G Broadcast demo with operational converged Broadcast/Broadband across telco network infrastructure with Saankhya “Direct to Mobile” SDR Chip |
| **Thomson Broadcast (N4206)**  
Thomson Software Defined Television, ATSC 3.0 demonstrations showing content distribution system, real-time cloud-based encoders and media asset management, playout automation, integrated playout, IP Security monitoring |

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<th><strong>Scheduler/STL</strong></th>
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| **ATBiS Co., Ltd (SU6905)**  
SFN Scheduling Gateway, Change Over and Simulator |
| **Enensys (SU6102)**  
MediaCast, SmartGate, VCC modulator |

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<th><strong>Test Equipment</strong></th>
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| **Avateq Corp (N5012)**  
ATSC 3.0 RF analyzers targeted to meet broadcasters’ everyday needs including the transmitter output, coverage area signal quality and SFN monitoring, and remote ALP streaming |
| **Enensys (SU6102)**  
MediaCast, SmartGate, VCC modulator |
| **Eurofins Digital Testing (N231)**  
Test Harness and suite of test tools enabling automated playout of conformance test materials for testing devices against ATSC 3.0 standards |
| **Triveni Digital (N3908)**  
New StreamScope XM Verifier, a software application for receiving, verifying, and recording ATSC 3.0 broadcast streams via RF, ROUTE, MMTP, or STLTP protocols |

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| **Alticast (SU10521)**  
Cloud-based solution designed to enable a seamless user experience for content consumption on various devices in the home with ATSC 3.0 broadcast streams |
| **Brandywine Communications**  
ATSC 3.0 Implementation & Optimization |
| **DTV Innovations (SU7821)**  
Next generation of PSIP Pro/Central platforms with full ATSC 3.0 Signaling and Service Announcement |
| **Enensys (SU6102)**  
MediaCast, SmartGate, VCC modulator |
| **ETRI (N231)**  
Seamless convergence of broadcast and broadband networks, Terrestrial 8K broadcast using ATSC 3.0 channel bonding, ATSC 3.0 master antenna TV system |
Gaian Solutions (IVE1 and IVE2 (North and Central Hall))
10 unique SaaS solutions for the ATSC 3.0 & 5G ecosystem, including AI, ML applications in Broadcast Advertising, Master Control reimagined, Device Proliferation & App Strategy, Spectrum Monetization

Saankhya Labs/ONE Media/Sinclair Broadcast Group (Wynn Tower Suite)
5G Broadcast demo with operational converged Broadcast/Broadband across telco network infrastructure with Saankhya “Direct to Mobile” SDR Chip

Thomson Broadcast (N4206)
Thomson Software Defined Television, ATSC 3.0 demonstrations showing content distribution system, real-time cloud-based encoders and media asset management, playout automation, integrated playout, IP Security monitoring

TitanTV (N6227)
ESG Data Service and MediaStar Scheduler

UniSoft and S&T (N4131)
ATSC 3.0 Delivery System with S&T ATCaster Signaling/ROUTE/MMT/ESG/NRT Server, S&T ATMonitor, and more from other partners

WideOrbit (SU7102)
WO Streaming as the targeted ad server, fully integrated with Digital Orders and Multicast logs in WO Traffic for the complete monetization platform from order to on-air/ad serving, reconciliation and invoicing

Verance (Wynn Salon Suites)
ATSC 3.0 Interactivity and Personalized Audio demonstrations powered by the Verance Aspect watermark.

Bred Software (SU9526CM)
ATSC 3.0 Interactive Advertising

Fincons Group (SU9024C)
Next Gen TV Broadcaster and OTT apps, Interactive and Addressable Advertising, TV Rights Management

PILOT (N1037)
Demonstration of interoperability of ATSC 3.0 receivers for interactive services, ATSC 3.0 content swapping and Next Generation TV user interfaces

ATEME (SU6005)
ATSC 3.0 encoding and transcoding

Dolby Laboratories (SU1702)
Demonstration of end-to-end ATSC 3.0 audio workflow and dialogue enhancement features with Dolby AC-4

DS Broadcasting (SU6907)
ATSC3.0 UHD encoder, ATSC3.0 Multi-channel encoder (up to 12 FHD/HD channels), ATSC3.0 IRD

DVEO (SU3306)
Cortina 4K HDR IP: ATSC 3.0 encoder ATSC 3.0 compatible MTP IP or TS outputs, TLV500E-ATSC 3.0 and ATSC 1.0 receiver/demodulator/decoder

Enensys (SU6102)
MediaCast, SmartGate, VCC modulator

Fraunhofer IIS (SU4816)
ATSC 3.0 next-generation audio standard with an MPEG-H Audio end-to-end chain for broadcast and DASH streaming, and the latest production tools and authoring units for creation of MPEG-H Audio content

Harmonic (SU810)
ATSC 3.0 Encoding/Packaging with Electra X encoders, Hybrid Services, and VOS360 Software-as-a-Service

KAI MEDIA (SU6506)
ATSC 3.0 HEVC Encoder and Decoder

PixTREE (SU6607)
ATSC 3.0 Live Video Encoder supporting realtime HDR10+

Psyx Research, Inc. (N4120)
Complete, ATSC 3.0 compatible, real time 3D workflow and delivery suite, including a 3D visualizer and 5.1.4 headphone virtualization for monitoring

SK Telecom/Sinclair Broadcast Group
North Hall (automotive)
Sinclair Broadcast Group and SK Telecom (in conjunction with Harman International/Samsung) will show ATSC 3.0 smart car services for Harman’s connected Maserati

The Telos Alliance TV Solutions Group (SU3921)
Linear Acoustic LA-5291 Professional Audio Codec provides decoding, encoding
SECURITY

Intertrust Technologies (SU13801MR)
Intertrust ExpressPlay XCA is the next-gen technology in securing and targeting content, using open standard Marlin technology and cloud architecture for one-way and two-way ATSC 3.0 broadcast networks, with converged OTT and Broadcast support

Thomson Broadcast (N4206)
Thomson Software Defined Television, ATSC 3.0 demonstrations showing content distribution system, real-time cloud-based encoders and media asset management, playout automation, integrated playout, IP Security monitoring

RECEIVERS

Airwavz.tv (N1831)
RedZone Receiver and TvXplorer video player for ATSC 3.0

BitRouter (N1831)
ATSC 3.0 set-top box, gateway and client

Coherent Logix (Renaissance Suite)
ATSC 3.0 Receiver and HEVC

DS Broadcasting (SU6907)
ATSC3.0 UHD encoder, ATSC3.0 Multi-channel encoder (up to 12 FHD/HD channels), ATSC3.0 IRD

DVEO (SU3306)
ATSC 3.0 encoding and transcoding

LowaSIS, Inc. (N231, N1134FP)
ATSC 3.0 set-top box to support OTA and OTT, Smart phone cradle to receive ATSC 3.0 channels, Home Media Gateway, to support targeted advertisement, and ATSC 3.0 receiver supporting Advanced Emergency Alert System

NAGRA KUDELSKI (SU3624)
A NAGRA ATSC 3.0 STB Stack implemented with NAGRA CAS, DRM and QR Code Server

Sony Electronics (C11001)
Private demonstrations of solutions for broadcasters

Wipro Limited (in partnership with AirWavz) (N1831)
ATSC 3.0 Receiver solution on Android OTT Box integrated with USB tuner/demod (from our partner Airwavz.tv) showing features like Live TV Playback, Channel Navigation, ESG Guide

ALERTING

AWARN Alliance (N1435)
Advanced emergency alerting and digital news integration

Digital Alert Systems (N4813)
ATSC 3.0 Advanced Emergency Information (AEA) with the DASDEC EAS-Net AEA module that aggregates emergency messages and multimedia, and generates a station’s Next-Gen TV emergency information messaging for transmission