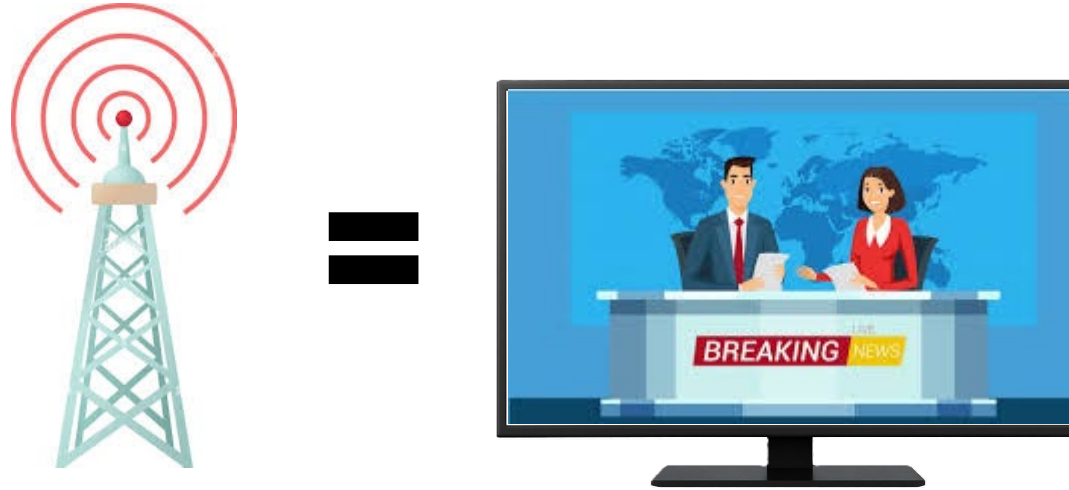


# **ATSC 3.0 Converter Device EAS Testing** **Internet Requirement for DRM Content**

# Background: ATSC 1.0 Televisions and Converter Devices



Price = Low Cost

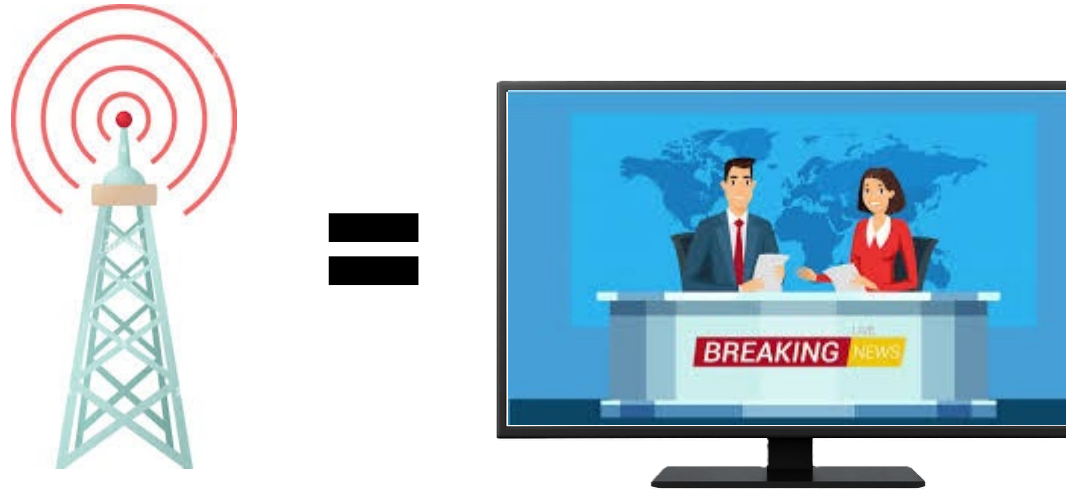
Setup = Easy

Marketplace = Widely Available

Connectivity = No Internet required

EAS = Emergency Alert messages are available across devices

# ATSC 3.0 Televisions with DRM Content



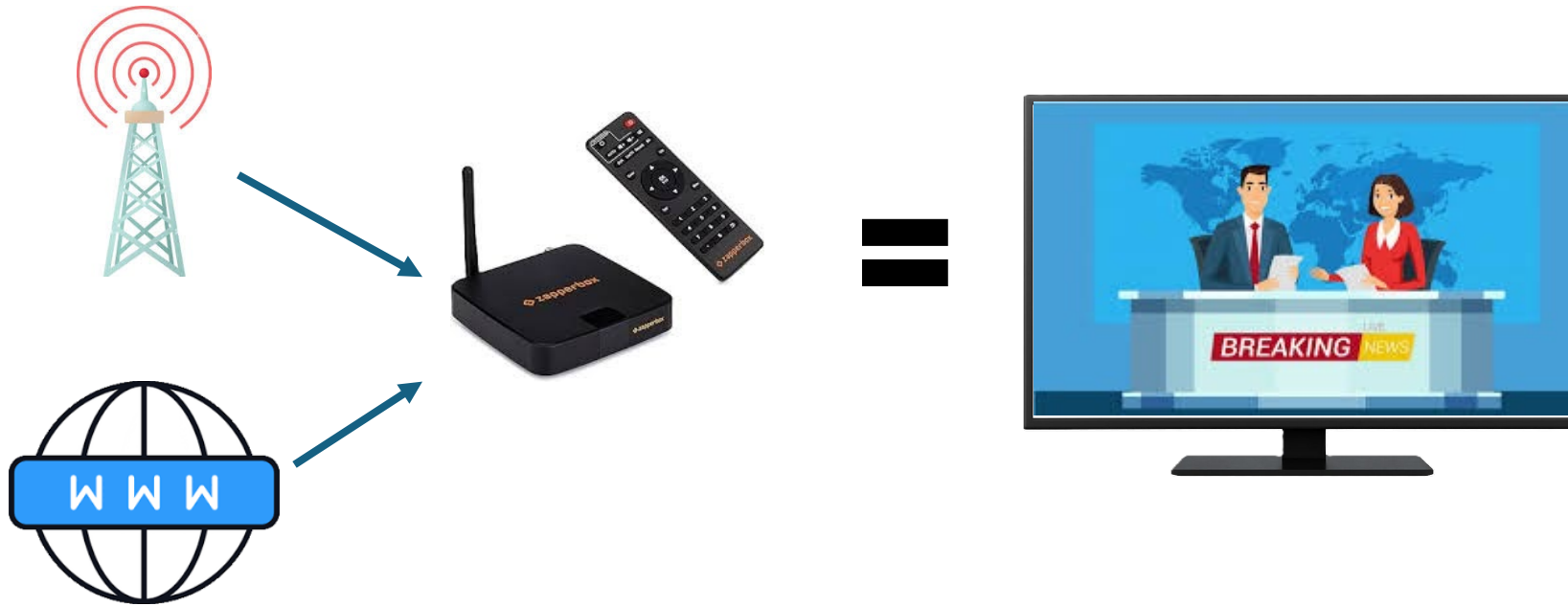
Price = High Cost

Connectivity = \*No internet required\*

EAS = Emergency Alert messages *available only on A3SA certified televisions*

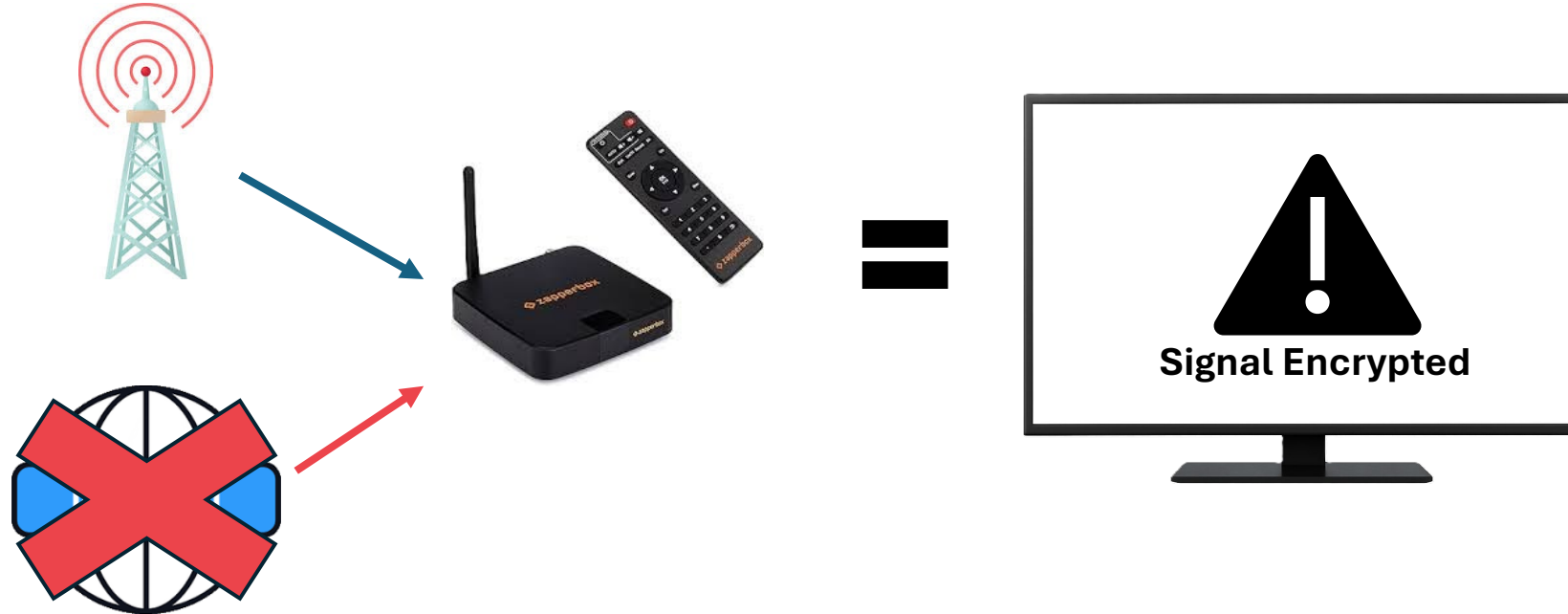
\* Stations may require Internet for conditional access to content, advertising and functionality\*

# ATSC 3.0 Converter Devices with DRM Content Requiring Internet Connection



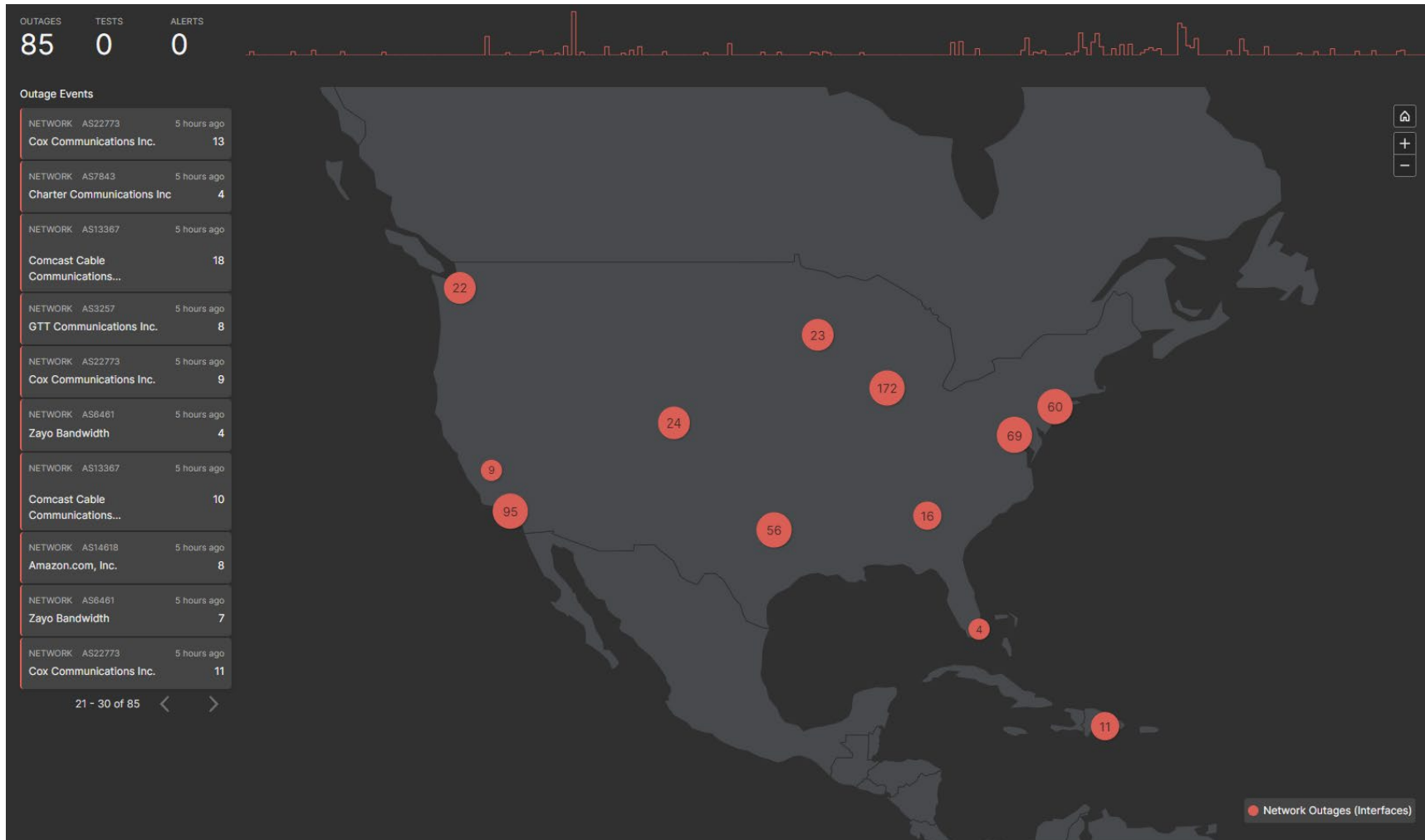
Connectivity: Constant Internet required for many devices.  
Presents challenges for homes that lack high-speed Internet access  
**and/or** whole-home internet connectivity.

# ATSC 3.0 Converter Device with DRM Content When Internet Access Is Unavailable or Unreliable



Emergency Alerts Unavailable = Poses serious life safety issue when needed most.

# Even Where the Internet Is Available, Outages Are Commonplace



Source: Cisco ThousandEyes 24-hour period between 6/1/26-6/2/26

# Active Internet Connection is Required to Receive EAS on DRM Encrypted Channels Using Converter Devices

We tested EAS delivery on DRM encrypted channels in four markets using two separate converter devices across four broadcast groups.

## TV Markets Tested

- Chicago
- Charlotte
- Green Bay
- South Bend

## Converter Devices Tested

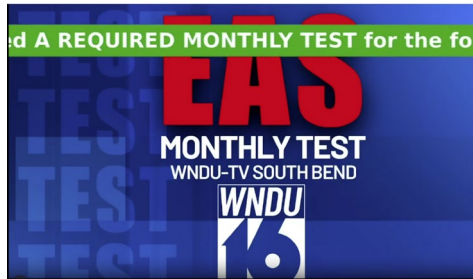
- Zapperbox (an A3SA certified device)
- HDHomerun (a popular ATSC 3.0 device)

Both devices produced same results in all markets.

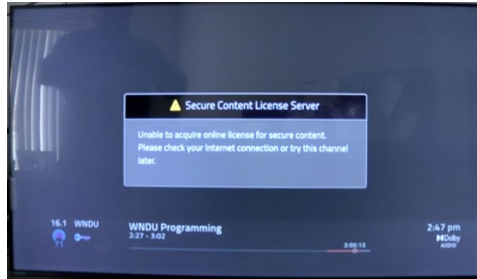
***No EAS for DRM encrypted channels when no internet connection was present.***

# EAS Required Monthly Test (“RMT”) when viewed on ATSC 3.0 Converter Device with DRM Content

RMT: South Bend, IN – 3/19/26



WNDU ATSC 1.0

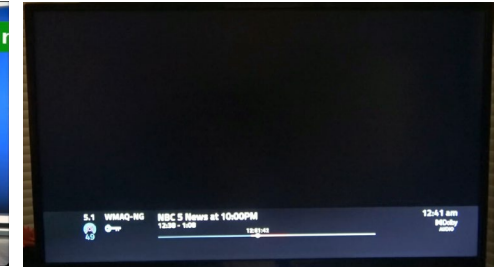


WNDU ATSC 3.0 DRM

RMT: Chicago, IL – 4/7/26

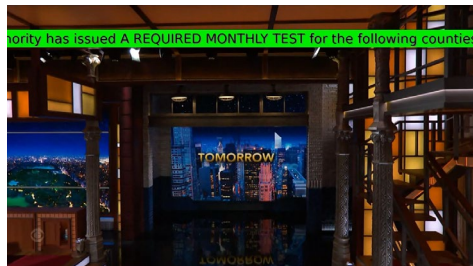


WMAQ ATSC 1.0

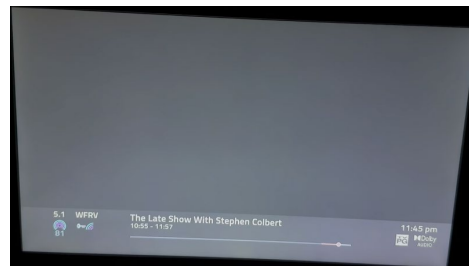


WMAQ ATSC 3.0 DRM

RMT: Green Bay, WI – 4/2/26



WFRV ATSC 1.0

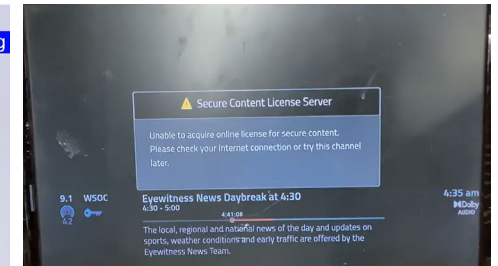


WFRV ATSC 3.0 DRM

RMT: Charlotte, NC – 4/9/26



WSOC ATSC 1.0



WSOC ATSC 3.0 DRM

\*An A3SA approved Zapperbox was used to capture the ATSC 3.0 DRM signal. No Internet connection was used.

# The NAB Highlighted EAS Is Vital On Broadcast Television

*“[B]roadcast stations are key distributors of FEMA’s National Public Warning System, which reaches 90 percent of the U.S. population.”*

*“[M]any communities lack access to high-speed Internet”*

*"19.3 percent of Americans with incomes below \$20,000 lack an internet subscription.”*

*“[I]n North Carolina, 15 percent of residents lack access to high-speed internet”*

***"By contrast, streaming services impose high costs, create consumer confusion, and diminish access”***

Reply Comments of NAB, GN-Docket 26-45 (April 13, 2026) (emphasis added)

<https://www.fcc.gov/ecfs/document/10413612125548/1>

# ATSC 3.0 Proponents Contend that the Internet Is NOT Necessary for EAS to Work

*“The Commission should be clear that: content protection works seamlessly with the emergency alerting systems and it does not impede, limit, or affect the reception of Emergency Alert System messages or other critical public-safety information. **In fact, the Advance Warning and Response Network (“AWARN”) Alliance confirms that content protection ‘does not in any way impede the delivery’ of emergency alerting or public-safety messaging, and that more than 18 million households with NextGen TV receivers can access ‘all NEXTGEN TV content, whether encrypted or not, without needing an Internet connection or subscription.’”***

Reply Comments of ATSC 3.0 SECURITY AUTHORITY LLC, GN Docket No. 16-142 (Feb. 18, 2026) (emphasis added),  
<https://www.fcc.gov/ecfs/document/1021998835878/1>

*“We applaud the Commission’s continued focus on ensuring Emergency Alert Systems (“EAS”) is made available to all broadcast audiences both during and after the transition. We agree that EAS must remain fully functional, and we strongly agree with the Commission’s emphasis on this point. **We disagree, however, with any suggestion that encryption inherently introduces a risk of blocking valid alerts. In our industry experience, properly implemented content protection frameworks protect content without interfering with EAS signaling.**”*

Comments of Pearl TV, GN Docket No. 16-142 (Jan. 20, 2026), (emphasis added)  
<https://www.fcc.gov/ecfs/document/10121280279141/1>

# Recommendations

- **The Simulcast and Substantially Similar Rules should be extended.**
  - Major Issues Remain (e.g. EAS, Consumer Costs, Gatekeeping, Patents, Fundamental Use of Spectrum, Business Model and Consumer Adoption)
- **Weigel’s proposed guardrails for any further ATSC 3.0 transition help address EAS concerns.**

*Every ATSC 3.0 transmission should be required to transmit a “Broadcast PLP” that includes:*

- 1) A minimum 19.3 Mbps dedicated to free over-the-air video.** Aimed at preserving an eco-system with a critical mass of free over-the-air content. EAS available across over-the-air video services.
- 2) No internet required to access content within 19.3 Mbps, including when encrypted using DRM.** Aimed at preserving over-the-air TV’s ease of use and accessibility. EAS messages must not require consumers to have access to the Internet.
- 3) A minimum receive threshold equal or less than ATSC 1.0.** Aimed at ensuring that free over-the-air signals can be received by viewers. EAS in 3.0 will not require consumers to purchase or adjust their antennas.

*With Weigel’s Guardrails, ATSC 3.0 can provide the “Best of Both Worlds”  
for the Viewer Experience and Broadcaster Optionality.*