



Telos®

Omnia®



L₁ LINEAR ACOUSTIC®



M MINNETONKA

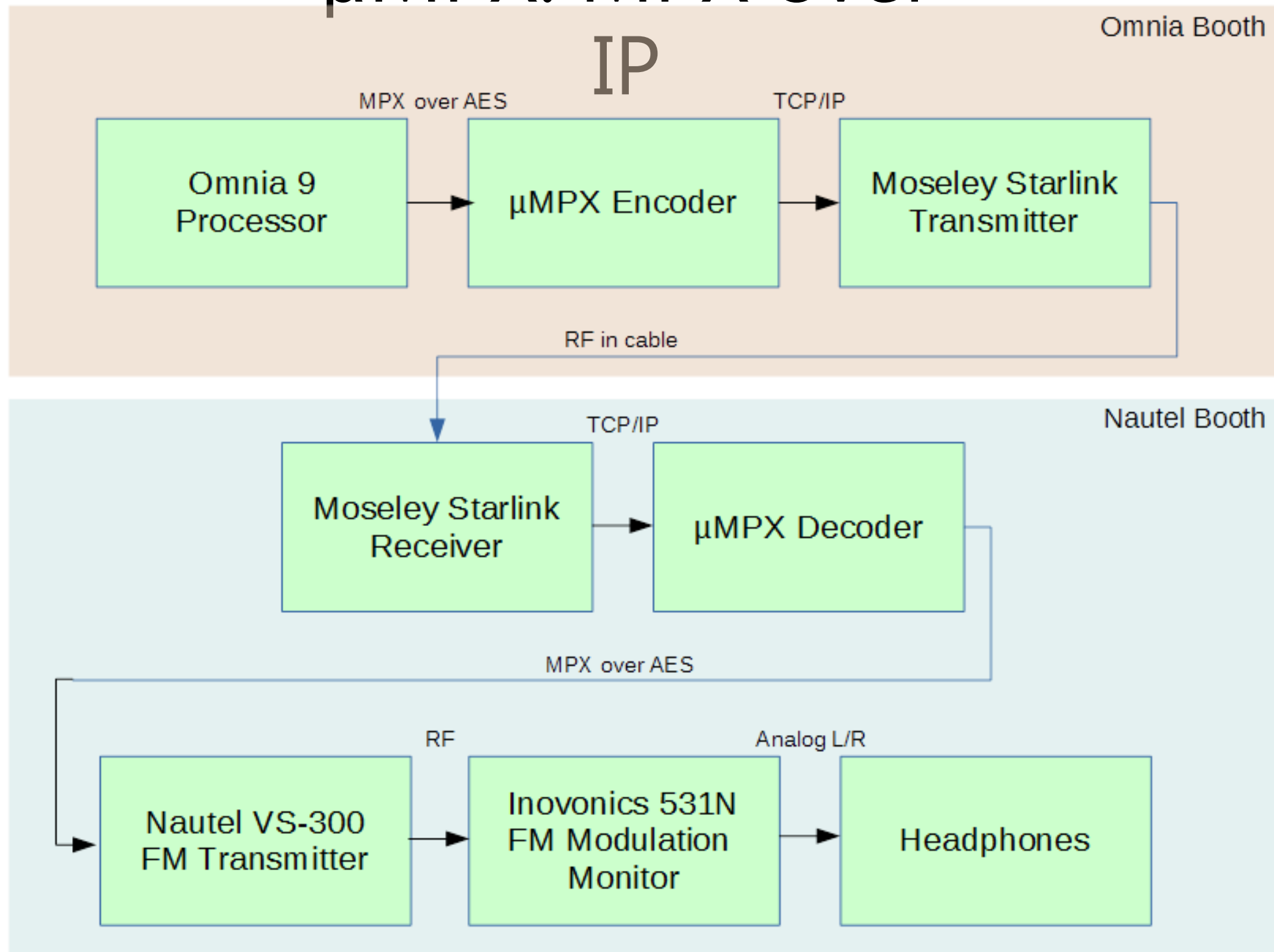
In cooperation with:



μMPX MPX over IP

- Many stations today use a analog composite STL.
- μMPX is the first digital composite codec designed to carry the composite baseband, including RDS on a standard broadcast IP STL in 320kbps. *In the same bandwidth as a standard analog composite STL!*
- With this technology, stations can have a fully digital path, with improved audio performance and reliability in the same STL bandwidth
- Today, it is just a technology demonstration – but it works, and you can hear it on the show floor.

μMPX: MPX over IP



The demo is taking place at the Omnia, Nautel and Moseley booths

μMPX

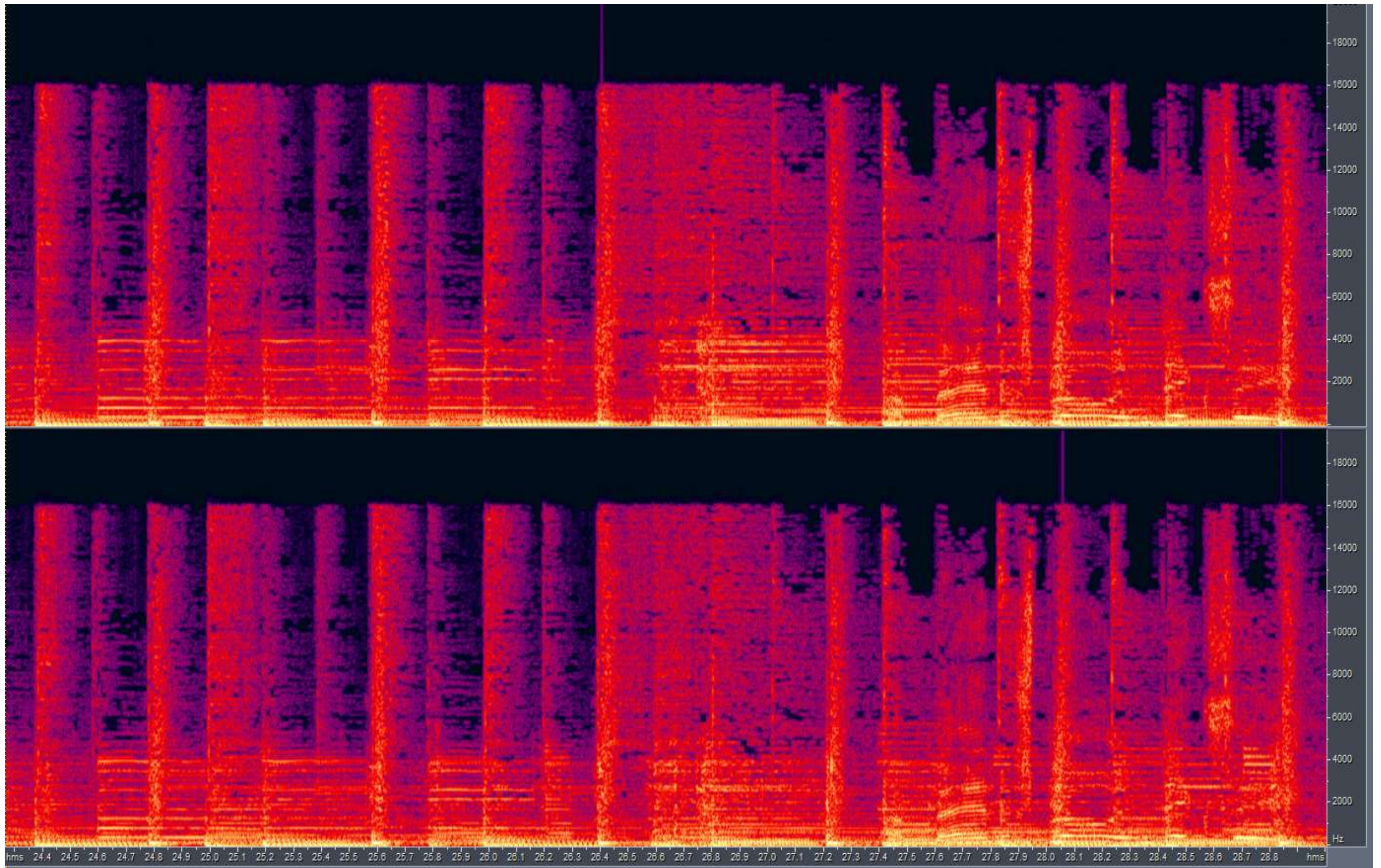
MPX over IP

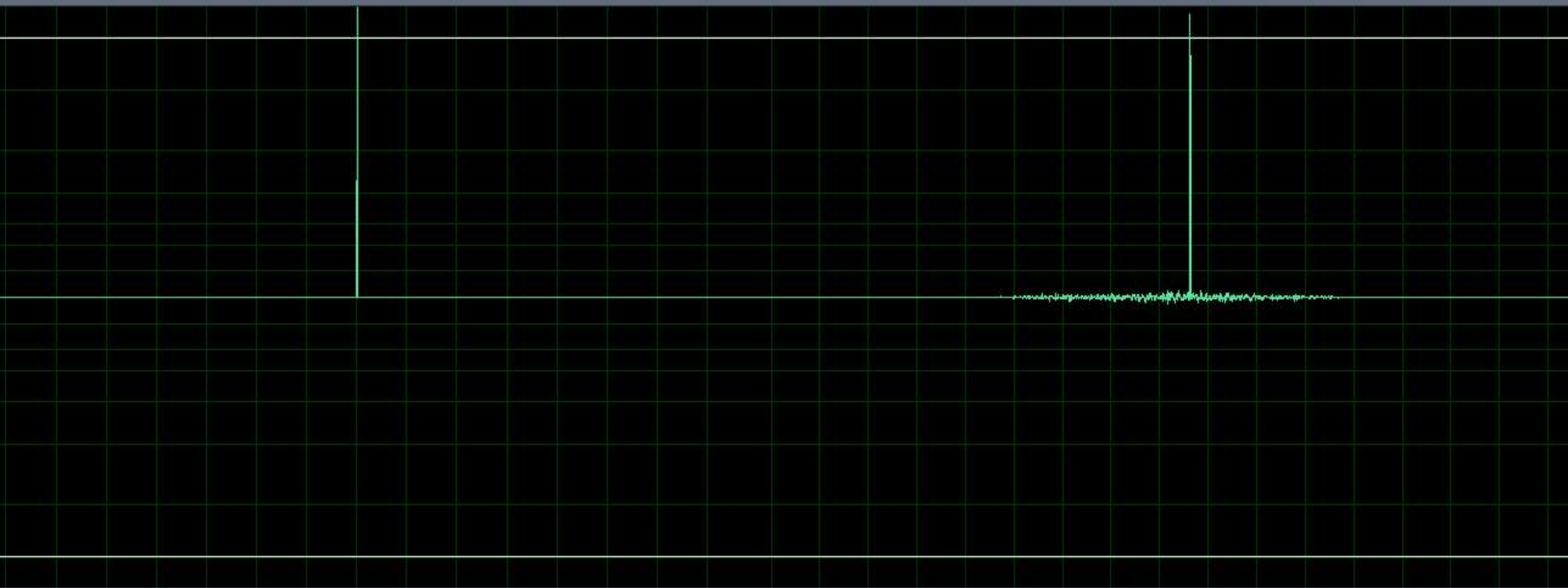
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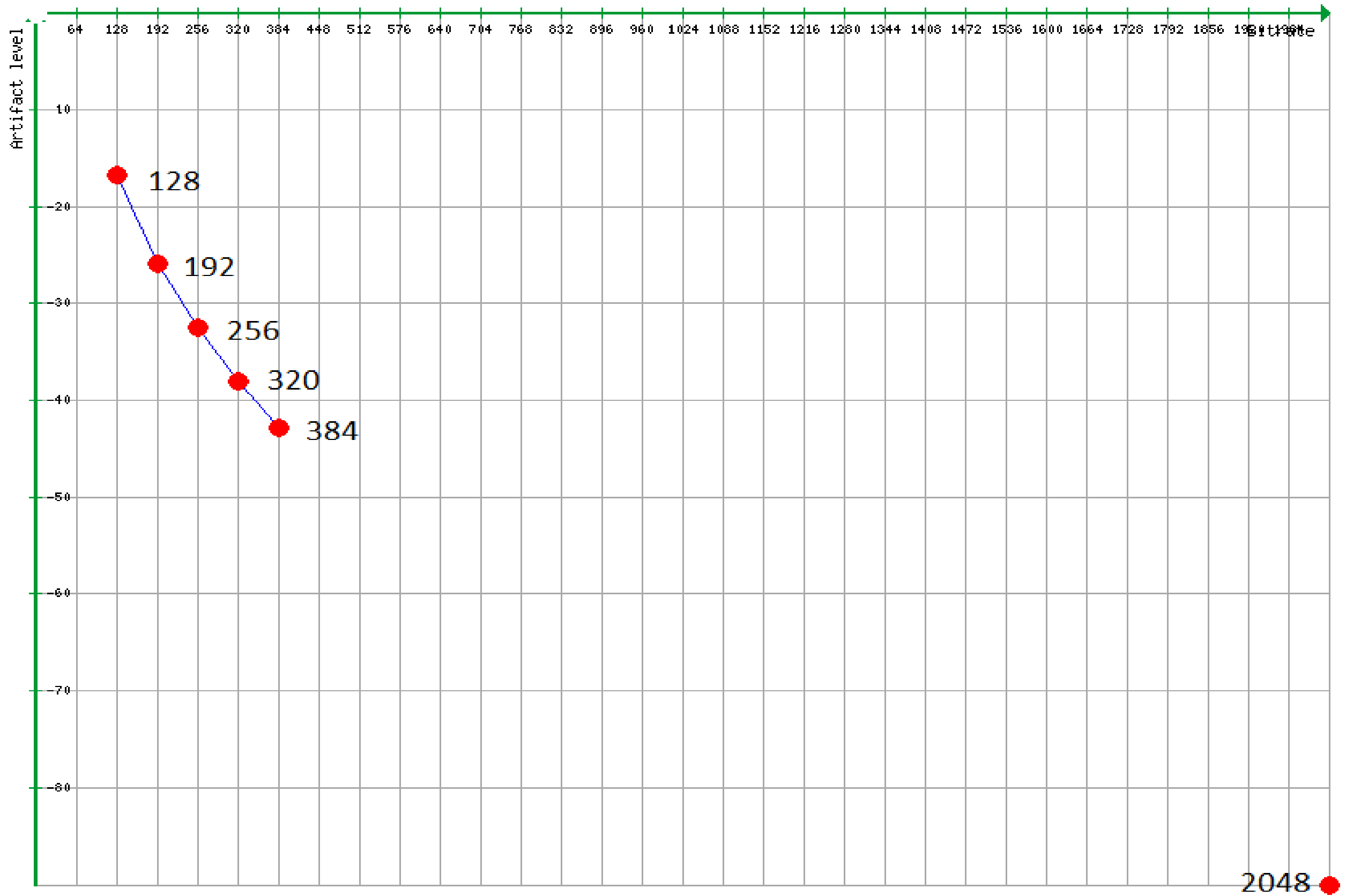
Hans van Zutphen
and
Frank Foti

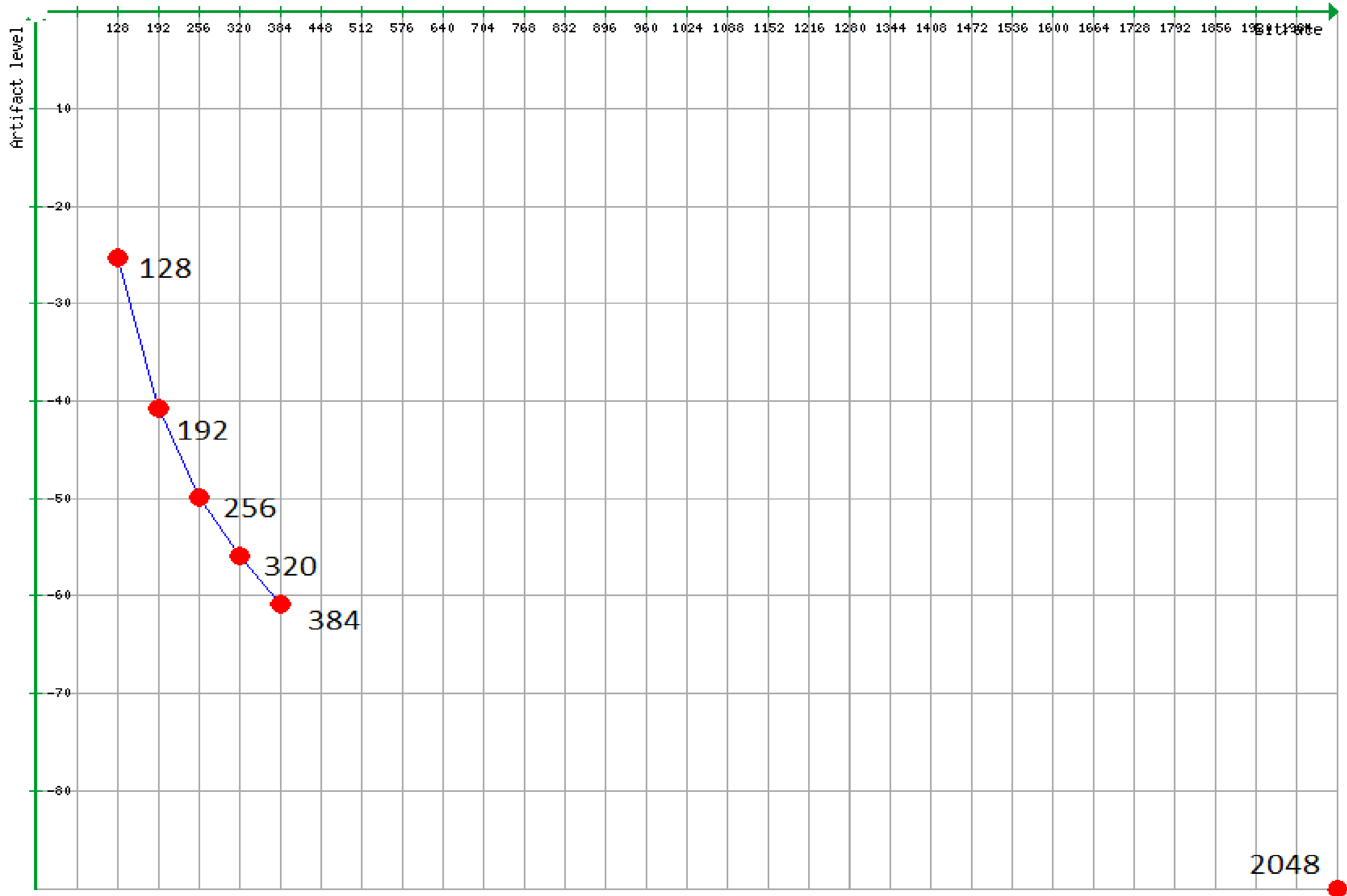
μMPX: MPX over IP

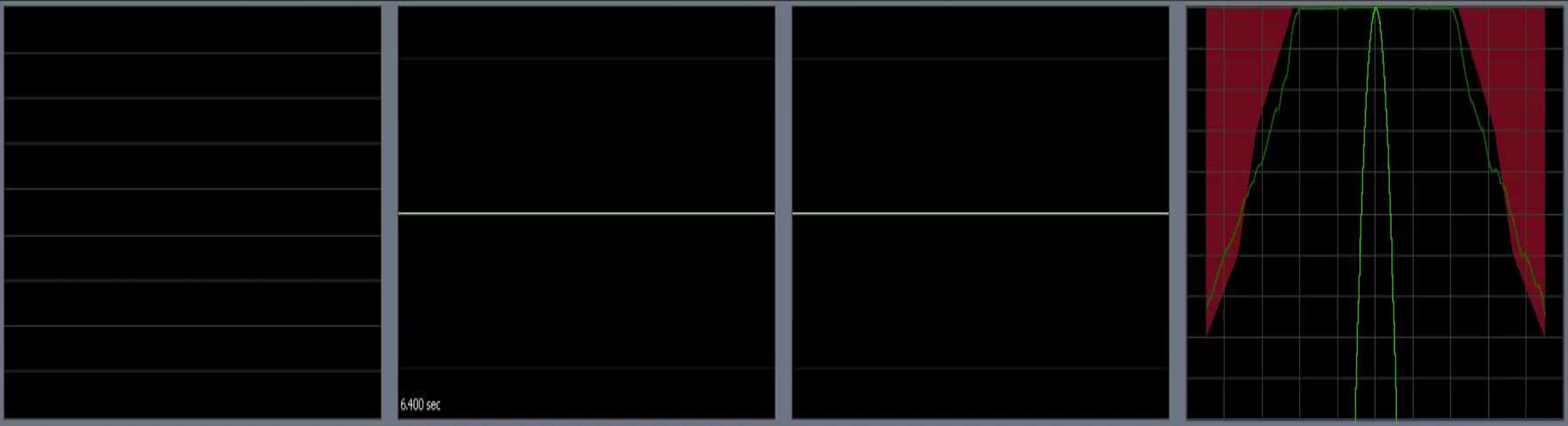
- It is the only lossy codec designed specifically for FM.
- Traditional lossy codecs were designed to be used in a noiseless (non FM) environment.
- The artifacts that are caused by them are not masked in any way by FM transmission, meaning the worst of two worlds - FM artifacts and coding artifacts
- Traditional lossy codecs create large peaks, which you would need to handle at the transmitter site.
- μMPX was designed to be used to feed a properly encoded FM signal, including peak control.











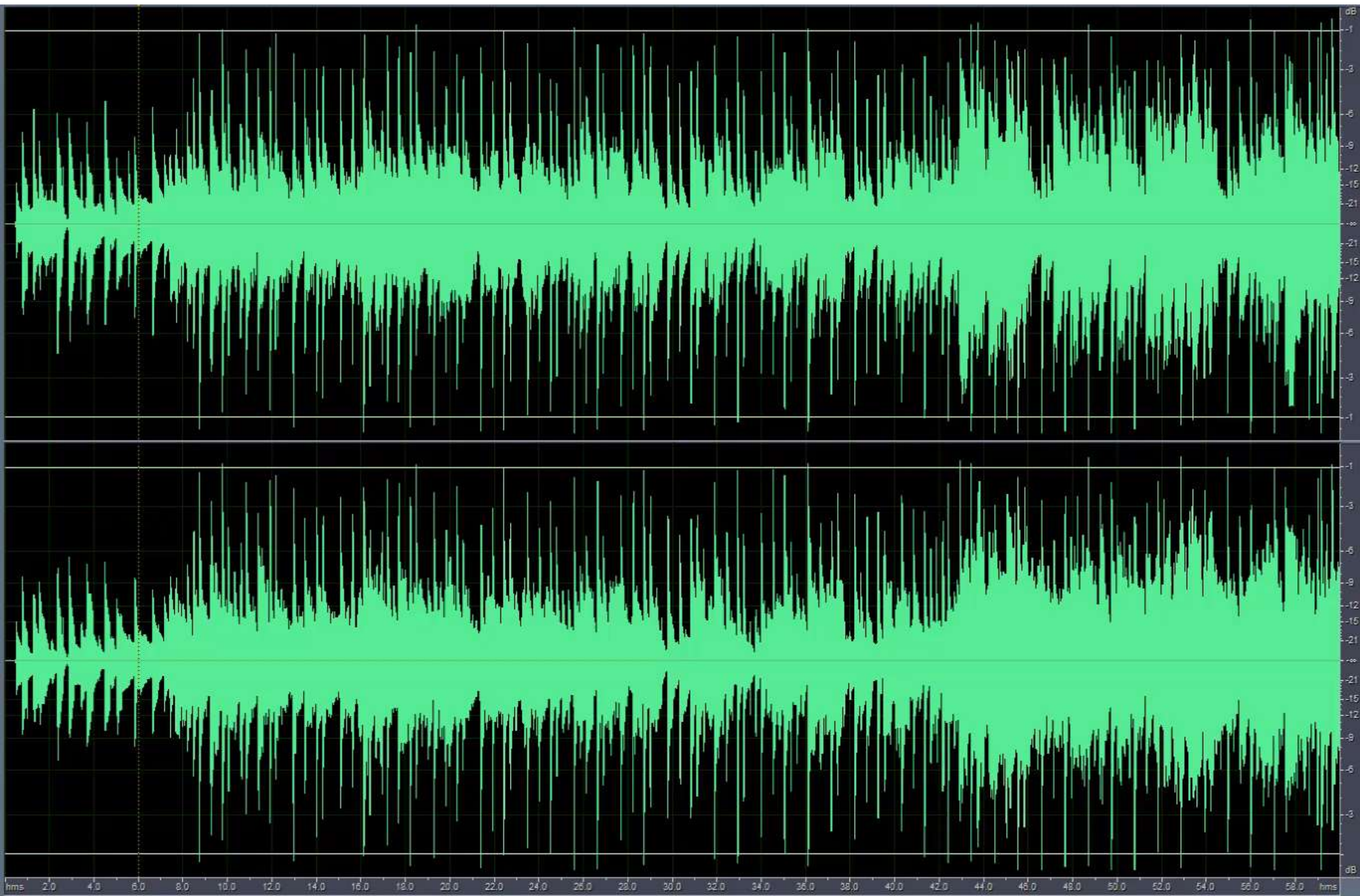
MPX spectrum

MPX waveform
100% modulation

Demodulated left channel
Upto 140% modulation

RF spectrum

1. 128 kbps
2. 192 kbps
3. 256 kbps
4. 320 kbps
5. 384 kbps



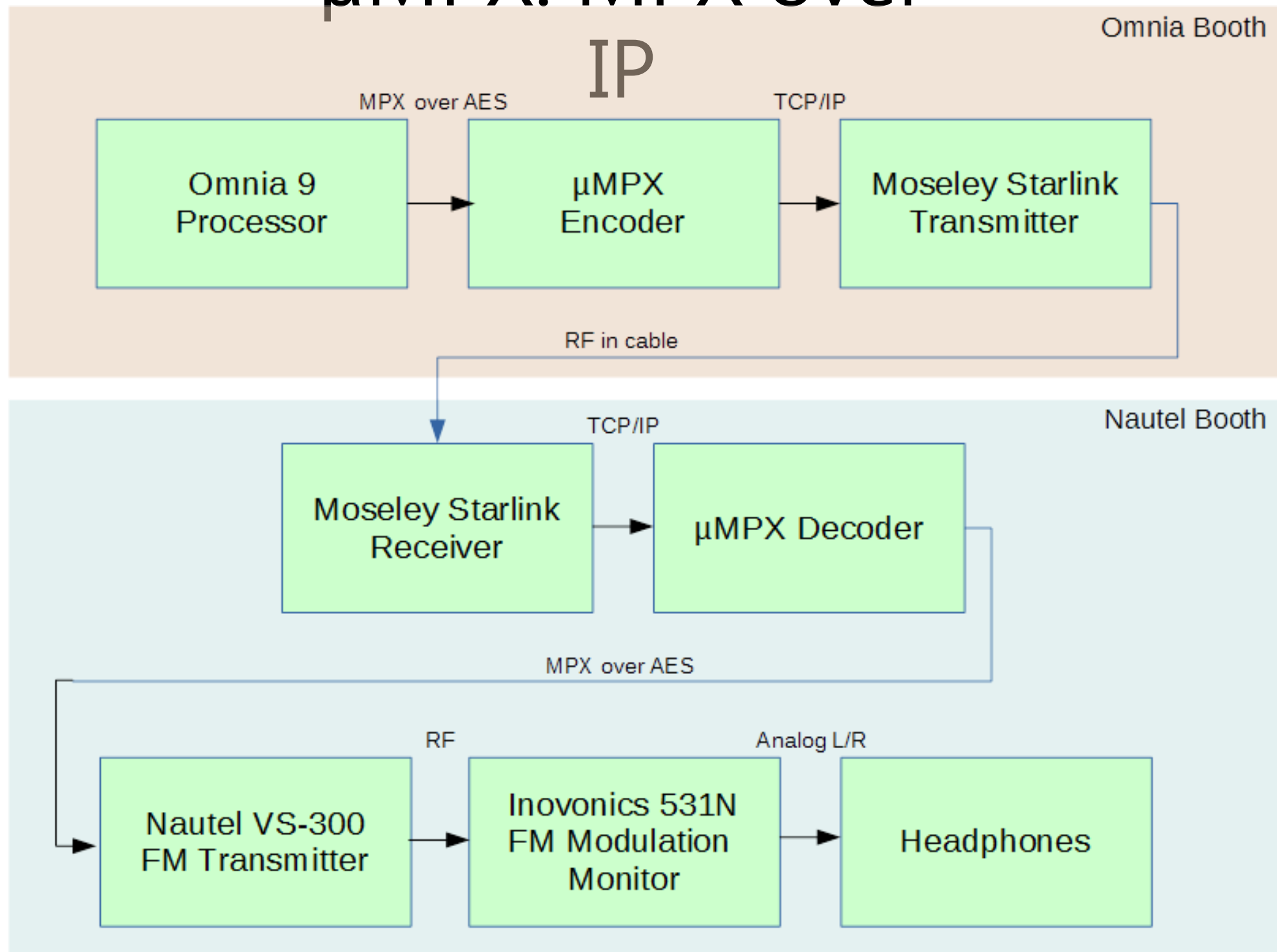
μ MPX MPX over IP

Use existing equipment for composite

Provide additional composite streams within a single channel

Saves money

μMPX: MPX over IP



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